

STS Adult Cardiac Database Data Specifications

Version 2.73

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Note: - ALL fields defined in these specifications with "Core: Yes" are to be collected by all sites.

- A Data Collection Form must be created for each admission to the hospital.

- Fields indicated with a gray background are no longer being collected.

STS Adult Cardiac Database

Version: 2.73

Long Name: Software Vendor Identifier *SeqNo:* 10

Short Name: **VendorID** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName AdultData

Definition: Name (assigned by STS) given to identify software vendor (up to 8 characters). Vendors should use standard name identification across sites. Changes to Vendor Name Identification must be approved by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

Long Name: Software Version *SeqNo:* 20

Short Name: **SoftVrsn** *Core:* Yes

Section Name: Administrative *Harvest:* Yes

DBTableName AdultData

Definition: Vendor's software product name and version number identifying the software which created this record. Vendor controls the value in this field. Version passing certification/harvest testing will be noted at warehouse.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

Long Name: STS Data Version *SeqNo:* 30
Short Name: **DataVrsn** *Core:* Yes
Section Name: Administrative *Harvest:* Yes

DBTableName AdultData

Definition: Version number of the STS Data Specifications/Dictionary, to which each record conforms. It will identify which fields should have data, and what are the valid data for each field. This must be entered into the record automatically by the software.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

Long Name: On-Demand Files Version Number *SeqNo:* 31
Short Name: **OnDemandVrsn** *Core:* Yes
Section Name: Administrative *Harvest:* Yes

DBTableName AdultData

Definition: The version number of the On-Demand lists in use at the time this data record was created or edited. The value is inserted into the record at the time the record is created or is modified by the user. The version numbers will be specified by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

Long Name: Participant ID *SeqNo:* 40
Short Name: **ParticID** *Core:* Yes
Section Name: Administrative *Harvest:* Yes

DBTableName AdultData

Definition: Participant ID is a unique number assigned to each database participant by the STS. A database participant is defined as one entity that signs a Participation Agreement with the STS, submits one data file to the harvest, and gets back one report on their data. The participant ID must be entered into each record.

Each participant's data if submitted to harvest must be in one data file. If one participant keeps their data in more than one file (e.g. at two sites), then the participant must combine them back into one file for harvest submission.

If two or more participants share a single purchased software, and enter cases into one database, then the data must be extracted into two different files, one for each participant ID, with each record having the correct participant ID number.

LowValue: 10000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 39999 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text - Length exactly 5
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User or Automatic

Long Name: Record ID *SeqNo:* 50
Short Name: **RecordID** *Core:* Yes
Section Name: Administrative *Harvest:* Yes

DBTableName AdultData

Definition: An arbitrary, unique value generated by the software that permanently identifies each record in the participant's database (note that unlike the PatID value, this does not identify the individual patient). The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a record, this value can never be changed or reused. The data warehouse will use this value to communicate issues about individual records with the participant. It may also be used by the data warehouse to link this record to other clinical data.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* Automatic

Long Name: Cost Link *SeqNo:* 60
Short Name: **CostLink** *Core:* Yes
Section Name: Administrative *Harvest:* Optional

DBTableName AdultData

Definition: A participant specified alpha-numeric code that can be used to link this record's clinical data with the participant's cost information for this patient admission. This information may be used in the future to perform procedure cost analysis (for which the actual cost data would have to be harvested separately). The value in this field must not be the patient's Medical Record Number, Social Security Number or any other patient identifying value.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: STS Trial Link Number *SeqNo:* 70
Short Name: **STSTLink** *Core:* No
Section Name: Administrative *Harvest:* No

DBTableName AdultData

Definition: Enter the number 1 (one) for a patient known to be in an IRB-approved clinical trial at the time of the surgical procedure.
 Enter the number 9 (nine) for a patient known NOT to be in an IRB-approved clinical trial at the time of the surgical procedure.
 Leave blank if it is not known whether or not the patient is enrolled in a clinical trial.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---|
| 1 | Patient known to be in an IRB-approved clinical trial |
| 9 | Patient known not to be in an IRB-approved clinical trial |

Long Name: Patient ID *SeqNo:* 80
Short Name: **PatID** *Core:* Yes
Section Name: Administrative *Harvest:* Yes

DBTableName AdultData

Definition: An arbitrary value (not a recognizable ID like Social Security Number or Medical Record Number) that uniquely and permanently identifies each patient. The value of the identifier is a combination of a code assigned to the software developer by the STS, and a value generated by the software to create a unique value. Once assigned to a patient, this can never be changed or reused. If a patient is admitted to the hospital more than once, each record for that patient will have the same value in this field.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Automatic

Long Name: Patient Last Name *SeqNo:* 90
Short Name: **PatLName** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the patient's last name documented in the medical record. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Patient First Name *SeqNo:* 100
Short Name: **PatFName** *Core:* Yes
Section Name: Demographics *Harvest:* Optional
DBTableName AdultData
Definition: Indicate the patient's first name documented in the medical record. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient M.I. *SeqNo:* 110
Short Name: **PatMInit** *Core:* No
Section Name: Demographics *Harvest:* No
DBTableName AdultData
Definition: Indicate the patient's middle initial documented in the medical record. Leave "blank" if no middle name. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text - Length exactly 1
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient Middle Name *SeqNo:* 120
Short Name: **PatMName** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the patient's middle name as documented in the medical record. Leave "blank" if no middle name. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Date of Birth *SeqNo:* 130
Short Name: **DOB** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the patient's date of birth using 4-digit format for year. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date mm/dd/yyyy
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient Age *SeqNo:* 140
Short Name: **Age** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the patient's age in years, at time of surgery. This should be calculated from the date of birth and the date of surgery, according to the convention used in the USA (the number of birthdate anniversaries reached by the date of surgery). If age is less than 18, the data record will be accepted into the database, but will not be included in the national analysis and report.

LowValue: 18 *UsualRangeLow:* 18 *ACCField:* Not mapped
HighValue: 110 *UsualRangeHigh:* 100 *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* Yes

Parent Long Name: *Format:* Integer
ParentShortName: *DataLength:*
ParentValue: *Data Source:* Calculated

Long Name: Sex *SeqNo:* 150
Short Name: **Gender** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the patient's sex at birth as either male or female.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Male
2	Female

Long Name: Social Security # *SeqNo:* 160
Short Name: **SSN** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the nine-digit patient's Social Security Number (SSN). Although this is the Social Security Number in the USA, other countries may have a different National Patient Identifier Number. For example in Canada, this would be the Social Insurance Number. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Medical Record Number *SeqNo:* 170
Short Name: **MedRecN** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the patient's medical record number at the hospital where surgery occurred. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient's Street Address *SeqNo:* 180
Short Name: **PatAddr** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the street address at which the patient resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient's City *SeqNo:* 190
Short Name: **PatCity** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the city in which the patient resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient's Region *SeqNo:* 200
Short Name: **PatRegion** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the region of the country (i.e., state or province) in which the patient resides at time of admission.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient's ZIP Code *SeqNo:* 210
Short Name: **PatZIP** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the ZIP Code of the patient's local residence. Outside the USA, this data may be known by other names such as Postal Code (needing 6 characters). Software should allow sites to collect at least up to 10 characters to allow for Zip+4 values.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: *Format:* Text
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Patient's Country *SeqNo:* 220
Short Name: **PatCountry** *Core:* Yes
Section Name: Demographics *Harvest:* Optional
DBTableName: AdultData

Definition: Indicate the patient's country of residence at time of admission.

List of countries provided by the United Nations, which is the following URL:
 United Nations Statistics Division, 15 April 2009
 (<http://unstats.un.org/unsd/methods/m49/m49alpha.htm>)

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	AFGHANISTAN
2	ÅLAND ISLAND
3	ALBANIA
4	ALGERIA
5	AMERICAN SAMOA
6	ANDORRA
7	ANGOLA
8	ANGUILLA
9	ANTARCTICA
10	ANTIGUA AND BARBUDA
11	ARGENTINA
12	ARMENIA
13	ARUBA
14	AUSTRALIA
15	AUSTRIA
16	AZERBAIJAN
17	BAHAMAS
18	BAHRAIN
19	BANGLADESH

- 20 BARBADOS
- 21 BELARUS
- 22 BELGIUM
- 23 BELIZE
- 24 BENIN
- 25 BERMUDA
- 26 BHUTAN
- 27 BOLIVIA
(PLURINATIONAL STATE
OF)
- 28 BOSNIA AND
HERZEGOVINA
- 29 BOTSWANA
- 30 BOUVET ISLAND
- 31 BRAZIL
- 32 BRITISH INDIAN OCEAN
TERRITORY
- 33 BRITISH VIRGIN ISLANDS
- 34 BRUNEI DARUSSALAM
- 35 BULGARIA
- 36 BURKINA FASO
- 37 BURUNDI
- 38 CAMBODIA
- 39 CAMEROON
- 40 CANADA
- 41 CAPE VERDE
- 42 CAYMAN ISLANDS
- 43 CENTRAL AFRICAN
REPUBLIC
- 44 CHAD
- 45 CHILE
- 46 CHINA
- 47 CHRISTMAS ISLAND
- 48 COCOS (KEELING)
ISLANDS
- 49 COLOMBIA
- 50 COMOROS
- 51 CONGO
- 52 COOK ISLANDS
- 53 COSTA RICA

- 54 CÔTE D'IVOIRE
- 55 CROATIA
- 56 CUBA
- 57 CYPRUS
- 58 CZECH REPUBLIC
- 59 DEMOCRATIC PEOPLE'S
REPUBLIC OF KOREA
- 60 DEMOCRATIC REPUBLIC
OF THE CONGO
- 61 DENMARK
- 62 DJIBOUTI
- 63 DOMINICA
- 64 DOMINICAN REPUBLIC
- 65 EAST TIMOR
- 66 ECUADOR
- 67 EGYPT
- 68 EL SALVADOR
- 69 EQUATORIAL GUINEA
- 70 ERITREA
- 71 ESTONIA
- 72 ETHIOPIA
- 73 FAEROE ISLANDS
- 74 FALKLAND ISLANDS
(MALVINAS)
- 75 FIJI
- 76 FINLAND
- 77 FRANCE
- 78 FRANCE, METROPOLITAN
- 79 FRENCH GUIANA
- 80 FRENCH POLYNESIA
- 81 FRENCH SOUTHERN
TERRITORIES
- 82 GABON
- 83 GAMBIA
- 84 GEORGIA
- 85 GERMANY
- 86 GHANA
- 87 GIBRALTAR
- 88 GREECE

- 89 GREENLAND
- 90 GRENADA
- 91 GUADELOUPE
- 92 GUAM
- 93 GUATEMALA
- 94 GUERNSE
- 95 GUINEA
- 96 GUINEA-BISSAU
- 97 GUYANA
- 98 HAITI
- 99 HEARD AND MC DONALD
ISLANDS
- 100 HOLY SEE
- 101 HONDURAS
- 102 HONG KONG SPECIAL
ADMINISTRATIVE
REGION OF CHINA
- 103 HUNGARY
- 104 ICELAND
- 105 INDIA
- 106 INDONESIA
- 107 IRAN (ISLAMIC
REPUBLIC OF)
- 108 IRAQ
- 109 IRELAND
- 110 ISLE OF MAN
- 111 ISRAEL
- 112 ITALY
- 113 JAMAICA
- 114 JAPAN
- 115 JERSEY
- 116 JORDAN
- 117 KAZAKHSTAN
- 118 KENYA
- 119 KIRIBATI
- 120 KUWAIT
- 121 KYRGYZSTAN
- 122 LAO PEOPLE'S
DEMOCRATIC REPUBLIC

- 123 LATVIA
- 124 LEBANON
- 125 LESOTHO
- 126 LIBERIA
- 127 LIBYAN ARAB
JAMAHIRIYA
- 128 LIECHTENSTEIN
- 129 LITHUANIA
- 130 LUXEMBOURG
- 131 MACAO SPECIAL
ADMINISTRATIVE
REGION OF CHINA
- 132 MADAGASCAR
- 133 MALAWI
- 134 MALAYSIA
- 135 MALDIVES
- 136 MALI
- 137 MALTA
- 138 MARSHALL ISLANDS
- 139 MARTINIQUE
- 140 MAURITANIA
- 141 MAURITIUS
- 142 MAYOTTE
- 143 MEXICO
- 144 MICRONESIA
(FEDERATED STATES OF)
- 145 MONACO
- 146 MONGOLIA
- 147 MONTENEGRO
- 148 MONTSERRAT
- 149 MOROCCO
- 150 MOZAMBIQUE
- 151 MYANMAR
- 152 NAMIBIA
- 153 NAURU
- 154 NEPAL
- 155 NETHERLANDS
- 156 NETHERLANDS ANTILLES
- 157 NEW CALEDONIA

- 158 NEW ZEALAND
- 159 NICARAGUA
- 160 NIGER
- 161 NIGERIA
- 162 NIUE
- 163 NORFOLK ISLAND
- 164 NORTHERN MARIANA
ISLANDS
- 165 NORWAY
- 166 OCCUPIED PALESTINIAN
TERRITORY
- 167 OMAN
- 168 PAKISTAN
- 169 PALAU
- 170 PANAMA
- 171 PAPUA NEW GUINEA
- 172 PARAGUAY
- 173 PERU
- 174 PHILIPPINES
- 175 PITCAIRN
- 176 POLAND
- 177 PORTUGAL
- 178 PUERTO RICO
- 179 QATAR
- 180 REPUBLIC OF KOREA
- 181 REPUBLIC OF MOLDOVA
- 182 RÉUNION
- 183 ROMANIA
- 184 RUSSIAN FEDERATION
- 185 RWANDA
- 186 SAINT HELENA
- 187 SAINT KITTS AND NEVIS
- 188 SAINT LUCIA
- 189 SAINT PIERRE AND
MIQUELON
- 190 SAINT VINCENT AND
THE GRENADINES
- 191 SAINT-BARTHÉLEM
- 192 SAINT-MARTIN (FRENCH

- PART)
- 193 SAMOA
 - 194 SAN MARINO
 - 195 SAO TOME AND PRINCIPE
 - 196 SAUDI ARABIA
 - 197 SENEGAL
 - 198 SERBIA
 - 199 SEYCHELLES
 - 200 SIERRA LEONE
 - 201 SINGAPORE
 - 202 SLOVAKIA
 - 203 SLOVENIA
 - 204 SOLOMON ISLANDS
 - 205 SOMALIA
 - 206 SOUTH AFRICA
 - 207 SOUTH GEORGIA AND
THE SOUTH SANDWICH
ISLANDS
 - 208 SPAIN
 - 209 SRI LANKA
 - 210 SUDAN
 - 211 SURINAME
 - 212 SVALBARD AND JAN
MAYEN ISLANDS
 - 213 SWAZILAND
 - 214 SWEDEN
 - 215 SWITZERLAND
 - 216 SYRIAN ARAB REPUBLIC
 - 217 TAIWAN, PROVINCE OF
CHINA
 - 218 TAJIKISTAN
 - 219 THAILAND
 - 220 THE FORMER YUGOSLAV
REPUBLIC OF
MACEDONIA
 - 221 TIMOR-LEST
 - 222 TOGO
 - 223 TOKELAU
 - 224 TONGA
 - 225 TRINIDAD AND TOBAGO

-
- 226 TUNISIA
 - 227 TURKEY
 - 228 TURKMENISTAN
 - 229 TURKS AND CAICOS
ISLANDS
 - 230 TUVALU
 - 231 UGANDA
 - 232 UKRAINE
 - 233 UNITED ARAB EMIRATES
 - 234 UNITED KINGDOM OF
GREAT BRITAIN AND
NORTHERN IRELAND
 - 235 UNITED REPUBLIC OF
TANZANIA
 - 236 UNITED STATES MINOR
OUTLYING ISLANDS
 - 237 UNITED STATES OF
AMERICA
 - 238 UNITED STATES VIRGIN
ISLANDS
 - 239 URUGUAY
 - 240 UZBEKISTAN
 - 241 VANUATU
 - 242 VENEZUELA
(BOLIVARIAN REPUBLIC
OF)
 - 243 VIET NAM
 - 244 WALLIS AND FUTUNA
ISLANDS
 - 245 WESTERN SAHARA
 - 246 YEMEN
 - 247 YUGOSLAVIA
 - 248 ZAIRE
 - 249 ZAMBIA
 - 250 ZIMBABWE
 - 999 OTHER
-

Long Name: Permanent Address *SeqNo:* 230
Short Name: **PermAddr** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient considers the given address to be their permanent address.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Patient's Permanent Street Address *SeqNo:* 240
Short Name: **PatPermAddr** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the street address at which the patient permanently resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Permanent Address *Format:* Text

ParentShortName: PermAddr *DataLength:*

ParentValue: = "No" *Data Source:* User

Long Name: Patient's Permanent Address City *SeqNo:* 250
Short Name: **PatPermCity** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the city in which the patient permanently resides at time of admission.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Permanent Address *Format:* Text
ParentShortName: PermAddr *DataLength:*
ParentValue: = "No" *Data Source:* User

Long Name: Patient's Permanent Address Region *SeqNo:* 260
Short Name: **PatPermRegion** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the region of the country (i.e., state or province) in which the patient permanently resides at time of admission.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Permanent Address *Format:* Text
ParentShortName: PermAddr *DataLength:*
ParentValue: = "No" *Data Source:* User

Long Name: Patient's Permanent Address ZIP Code *SeqNo:* 270
Short Name: **PatPermZIP** *Core:* Yes
Section Name: Demographics *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the ZIP Code of the patient's permanent residence. Outside the USA, this data may be known by other names such as Postal Code (needing 6 characters). Software should allow sites to collect at least up to 10 characters to allow for Zip+4 values.

This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Permanent Address *Format:* Text
ParentShortName: PermAddr *DataLength:*
ParentValue: = "No" *Data Source:* User

Long Name: Patient's Permanent Address Country *SeqNo:* 280
Short Name: **PatPermCountry** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the patient's country of permanent residence at time of admission.

List of countries provided by the United Nations, which is the following URL:
 United Nations Statistics Division, 15 April 2009
 (<http://unstats.un.org/unsd/methods/m49/m49alpha.htm>).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Permanent Address *Format:* Text (categorical values specified by STS)
ParentShortName: PermAddr *DataLength:*
ParentValue: = "No" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|----------------|
| 1 | AFGHANISTAN |
| 2 | ÅLAND ISLAND |
| 3 | ALBANIA |
| 4 | ALGERIA |
| 5 | AMERICAN SAMOA |

- 6 ANDORRA
- 7 ANGOLA
- 8 ANGUILLA
- 9 ANTARCTICA
- 10 ANTIGUA AND BARBUDA
- 11 ARGENTINA
- 12 ARMENIA
- 13 ARUBA
- 14 AUSTRALIA
- 15 AUSTRIA
- 16 AZERBAIJAN
- 17 BAHAMAS
- 18 BAHRAIN
- 19 BANGLADESH
- 20 BARBADOS
- 21 BELARUS
- 22 BELGIUM
- 23 BELIZE
- 24 BENIN
- 25 BERMUDA
- 26 BHUTAN
- 27 BOLIVIA
(PLURINATIONAL STATE
OF)
- 28 BOSNIA AND
HERZEGOVINA
- 29 BOTSWANA
- 30 BOUVET ISLAND
- 31 BRAZIL
- 32 BRITISH INDIAN OCEAN
TERRITORY
- 33 BRITISH VIRGIN ISLANDS
- 34 BRUNEI DARUSSALAM
- 35 BULGARIA
- 36 BURKINA FASO
- 37 BURUNDI
- 38 CAMBODIA
- 39 CAMEROON
- 40 CANADA

- 41 CAPE VERDE
- 42 CAYMAN ISLANDS
- 43 CENTRAL AFRICAN
REPUBLIC
- 44 CHAD
- 45 CHILE
- 46 CHINA
- 47 CHRISTMAS ISLAND
- 48 COCOS (KEELING)
ISLANDS
- 49 COLOMBIA
- 50 COMOROS
- 51 CONGO
- 52 COOK ISLANDS
- 53 COSTA RICA
- 54 CÔTE D'IVOIRE
- 55 CROATIA
- 56 CUBA
- 57 CYPRUS
- 58 CZECH REPUBLIC
- 59 DEMOCRATIC PEOPLE'S
REPUBLIC OF KOREA
- 60 DEMOCRATIC REPUBLIC
OF THE CONGO
- 61 DENMARK
- 62 DJIBOUTI
- 63 DOMINICA
- 64 DOMINICAN REPUBLIC
- 65 EAST TIMOR
- 66 ECUADOR
- 67 EGYPT
- 68 EL SALVADOR
- 69 EQUATORIAL GUINEA
- 70 ERITREA
- 71 ESTONIA
- 72 ETHIOPIA
- 73 FAEROE ISLANDS
- 74 FALKLAND ISLANDS
(MALVINAS)

- 75 FIJI
- 76 FINLAND
- 77 FRANCE
- 78 FRANCE, METROPOLITAN
- 79 FRENCH GUIANA
- 80 FRENCH POLYNESIA
- 81 FRENCH SOUTHERN
TERRITORIES
- 82 GABON
- 83 GAMBIA
- 84 GEORGIA
- 85 GERMANY
- 86 GHANA
- 87 GIBRALTAR
- 88 GREECE
- 89 GREENLAND
- 90 GRENADA
- 91 GUADELOUPE
- 92 GUAM
- 93 GUATEMALA
- 94 GUERNSE
- 95 GUINEA
- 96 GUINEA-BISSAU
- 97 GUYANA
- 98 HAITI
- 99 HEARD AND MC DONALD
ISLANDS
- 100 HOLY SEE
- 101 HONDURAS
- 102 HONG KONG SPECIAL
ADMINISTRATIVE
REGION OF CHINA
- 103 HUNGARY
- 104 ICELAND
- 105 INDIA
- 106 INDONESIA
- 107 IRAN (ISLAMIC
REPUBLIC OF)
- 108 IRAQ

- 109 IRELAND
- 110 ISLE OF MAN
- 111 ISRAEL
- 112 ITALY
- 113 JAMAICA
- 114 JAPAN
- 115 JERSEY
- 116 JORDAN
- 117 KAZAKHSTAN
- 118 KENYA
- 119 KIRIBATI
- 120 KUWAIT
- 121 KYRGYZSTAN
- 122 LAO PEOPLE'S
DEMOCRATIC REPUBLIC
- 123 LATVIA
- 124 LEBANON
- 125 LESOTHO
- 126 LIBERIA
- 127 LIBYAN ARAB
JAMAHIRIYA
- 128 LIECHTENSTEIN
- 129 LITHUANIA
- 130 LUXEMBOURG
- 131 MACAO SPECIAL
ADMINISTRATIVE
REGION OF CHINA
- 132 MADAGASCAR
- 133 MALAWI
- 134 MALAYSIA
- 135 MALDIVES
- 136 MALI
- 137 MALTA
- 138 MARSHALL ISLANDS
- 139 MARTINIQUE
- 140 MAURITANIA
- 141 MAURITIUS
- 142 MAYOTTE
- 143 MEXICO

- 144 MICRONESIA
(FEDERATED STATES OF)
- 145 MONACO
- 146 MONGOLIA
- 147 MONTENEGRO
- 148 MONTSERRAT
- 149 MOROCCO
- 150 MOZAMBIQUE
- 151 MYANMAR
- 152 NAMIBIA
- 153 NAURU
- 154 NEPAL
- 155 NETHERLANDS
- 156 NETHERLANDS ANTILLES
- 157 NEW CALEDONIA
- 158 NEW ZEALAND
- 159 NICARAGUA
- 160 NIGER
- 161 NIGERIA
- 162 NIUE
- 163 NORFOLK ISLAND
- 164 NORTHERN MARIANA
ISLANDS
- 165 NORWAY
- 166 OCCUPIED PALESTINIAN
TERRITORY
- 167 OMAN
- 168 PAKISTAN
- 169 PALAU
- 170 PANAMA
- 171 PAPUA NEW GUINEA
- 172 PARAGUAY
- 173 PERU
- 174 PHILIPPINES
- 175 PITCAIRN
- 176 POLAND
- 177 PORTUGAL
- 178 PUERTO RICO
- 179 QATAR

- 180 REPUBLIC OF KOREA
- 181 REPUBLIC OF MOLDOVA
- 182 RÉUNION
- 183 ROMANIA
- 184 RUSSIAN FEDERATION
- 185 RWANDA
- 186 SAINT HELENA
- 187 SAINT KITTS AND NEVIS
- 188 SAINT LUCIA
- 189 SAINT PIERRE AND
MIQUELON
- 190 SAINT VINCENT AND
THE GRENADINES
- 191 SAINT-BARTHÉLEM
- 192 SAINT-MARTIN (FRENCH
PART)
- 193 SAMOA
- 194 SAN MARINO
- 195 SAO TOME AND PRINCIPE
- 196 SAUDI ARABIA
- 197 SENEGAL
- 198 SERBIA
- 199 SEYCHELLES
- 200 SIERRA LEONE
- 201 SINGAPORE
- 202 SLOVAKIA
- 203 SLOVENIA
- 204 SOLOMON ISLANDS
- 205 SOMALIA
- 206 SOUTH AFRICA
- 207 SOUTH GEORGIA AND
THE SOUTH SANDWICH
ISLANDS
- 208 SPAIN
- 209 SRI LANKA
- 210 SUDAN
- 211 SURINAME
- 212 SVALBARD AND JAN
MAYEN ISLANDS
- 213 SWAZILAND

- 214 SWEDEN
- 215 SWITZERLAND
- 216 SYRIAN ARAB REPUBLIC
- 217 TAIWAN, PROVINCE OF
CHINA
- 218 TAJIKISTAN
- 219 THAILAND
- 220 THE FORMER YUGOSLAV
REPUBLIC OF
MACEDONIA
- 221 TIMOR-LEST
- 222 TOGO
- 223 TOKELAU
- 224 TONGA
- 225 TRINIDAD AND TOBAGO
- 226 TUNISIA
- 227 TURKEY
- 228 TURKMENISTAN
- 229 TURKS AND CAICOS
ISLANDS
- 230 TUVALU
- 231 UGANDA
- 232 UKRAINE
- 233 UNITED ARAB EMIRATES
- 234 UNITED KINGDOM OF
GREAT BRITAIN AND
NORTHERN IRELAND
- 235 UNITED REPUBLIC OF
TANZANIA
- 236 UNITED STATES MINOR
OUTLYING ISLANDS
- 237 UNITED STATES OF
AMERICA
- 238 UNITED STATES VIRGIN
ISLANDS
- 239 URUGUAY
- 240 UZBEKISTAN
- 241 VANUATU
- 242 VENEZUELA
(BOLIVARIAN REPUBLIC
OF)

- 243 VIET NAM
- 244 WALLIS AND FUTUNA ISLANDS
- 245 WESTERN SAHARA
- 246 YEMEN
- 247 YUGOSLAVIA
- 248 ZAIRE
- 249 ZAMBIA
- 250 ZIMBABWE
- 999 OTHER

Long Name: Race - White *SeqNo:* 290
Short Name: **RaceCaucasian** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes White. This includes a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity : The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting. (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Race - Black / African American *SeqNo:* 300
Short Name: **RaceBlack** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Black / African American. This includes a person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American."

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity : The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting.
 (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Race - Asian *SeqNo:* 310
Short Name: **RaceAsian** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Asian. This includes a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity : The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting. (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Race - American Indian / Alaskan Native *SeqNo:* 320
Short Name: **RaceNativeAm** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes American Indian / Alaskan Native. This includes a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity : The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting.
 (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Race - Native Hawaiian / Pacific Islander *SeqNo:* 330
Short Name: **RacNativePacific** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes Native Hawaiian / Pacific Islander. This includes a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Definition source: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity : The minimum categories for data on race and ethnicity for Federal statistics, program administrative reporting, and civil rights compliance reporting. (www.whitehouse.gov/omb/fedreg/1997standards.html).

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Race - Other *SeqNo:* 340
Short Name: **RaceOther** *Core:* Yes
Section Name: Demographics *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient's race, as determined by the patient or family, includes any other race.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes

2 No

Long Name: Hispanic or Latino or Spanish Ethnicity *SeqNo:* 350
Short Name: **Ethnicity** *Core:* Yes
Section Name: Demographics *Harvest:* Yes
DBTableName AdultData

Definition: Indicate if the patient is of Hispanic, Latino or Spanish ethnicity as reported by the patient / family.

LowValue: *UsualRangeLow:* *ACCFfield:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Referring Card-Cardiologist *SeqNo:* 360
Short Name: **RefCard** *Core:* Yes
Section Name: Demographics *Harvest:* No
DBTableName AdultData

Definition: Indicate the referring cardiologist's name.

LowValue: *UsualRangeLow:* *ACCFfield:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by User)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Referring Physician *SeqNo:* 370
Short Name: **RefPhys** *Core:* Yes
Section Name: Demographics *Harvest:* No

DBTableName AdultData

Definition: Indicate the primary referring physician's (PCP) name.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by User)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Hospital Name *SeqNo:* 380
Short Name: **HospName** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the full name of the facility where the procedure was performed. Values should be full, official hospital names with no abbreviations or variations in spelling for a single hospital. Values should also be in mixed-case.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by User)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

<i>Long Name:</i>	Hospital ZIP Code	<i>SeqNo:</i>	390
<i>Short Name:</i>	HospZIP	<i>Core:</i>	Yes
<i>Section Name:</i>	Hospitalization	<i>Harvest:</i>	Yes

DBTableName AdultData

Definition: Indicate the ZIP Code of the hospital. Outside the USA, these data may be known by other names such as Postal Code (needing 6 characters).

Software should allow sites to collect up to 10 characters to allow for Zip+4 values.

This field should be collected in compliance with state/local privacy laws.

<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	No
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	Hospital Name	<i>Format:</i>	Text (categorical values specified by User)
<i>ParentShortName:</i>	HospName	<i>DataLength:</i>	
<i>ParentValue:</i>	Is Not Missing	<i>Data Source:</i>	Lookup

<i>Long Name:</i>	Hospital State	<i>SeqNo:</i>	400
<i>Short Name:</i>	HospStat	<i>Core:</i>	Yes
<i>Section Name:</i>	Hospitalization	<i>Harvest:</i>	Yes

DBTableName AdultData

Definition: Indicate the abbreviation of the state or province in which the hospital is located.

<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	No
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	Hospital Name	<i>Format:</i>	Text - Length exactly 2
<i>ParentShortName:</i>	HospName	<i>DataLength:</i>	
<i>ParentValue:</i>	Is Not Missing	<i>Data Source:</i>	Lookup

Long Name: Hospital National Provider Identifier *SeqNo:* 410
Short Name: **HospNPI** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the hospital's National Provider Identifier (NPI). This number, assigned by the Center for Medicare and Medicaid Services (CMS), is used to uniquely identify facilities for Medicare billing purposes.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Hospital Name *Format:* Text (categorical values specified by User)

ParentShortName: HospName *DataLength:*

ParentValue: Is Not Missing *Data Source:* Lookup

Long Name: Payor - Government Health Insurance *SeqNo:* 420
Short Name: **PayorGov** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether government insurance was used by the patient to pay for part or all of this admission. Government insurance refers to patients who are covered by government-reimbursed care. This includes Medicare, Medicaid, Military Health Care (e.g. TriCare), State-Specific Plan, and Indian Health Service.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Payor - Government Health Insurance - Medicare *SeqNo:* 430
Short Name: **PayorGovMcare** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Medicare.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Health Insurance Claim Number *SeqNo:* 440
Short Name: **HICNumber** *Core:* Yes
Section Name: Hospitalization *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the Health Insurance Claim (HIC) number of the primary beneficiary. This is an 11-digit number that uniquely identifies an individual for a claim. This field should be collected in compliance with state/local privacy laws.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Payor - Government Health Insurance - Medicare *Format:* Text - Length exactly 11

ParentShortName: PayorGovMcare *DataLength:* 11
ParentValue: = "Yes" *Data Source:* User

Long Name: Payor - Government Health Insurance - Medicare - Fee For Service *SeqNo:* 450
Short Name: **PayorGovMcareFFS** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if patient is covered by Medicare Fee for Service.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Payor - Government Health Insurance - Medicare *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGovMcare *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes
 2 No

Long Name: Payor - Government Health Insurance - Medicaid *SeqNo:* 460
Short Name: **PayorGovMcaid** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Medicaid.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes
 2 No

Long Name: Payor - Government Health Insurance - Military Health Care *SeqNo:* 470
Short Name: **PayorGovMil** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Military Health Care.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition only

HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Payor - Government Health Insurance - State-Specific Plan *SeqNo:* 480
Short Name: **PayorGovState** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included State-Specific Plan (e.g., MI Health, TennCare, Mass).

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition only

HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Payor - Government Health Insurance - Indian Health Service *SeqNo:* 490
Short Name: **PayorGovIHS** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included Indian Health Service.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Payor - Government Health Insurance - Correctional Facility *SeqNo:* 500
Short Name: **PayorGovCor** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the government insurance used by the patient to pay for part or all of this admission included a state or federal correctional facility.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Payor - Government Health Insurance *Format:* Text (categorical values specified by STS)

ParentShortName: PayorGov *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Payor - Commercial Health Insurance *SeqNo:* 510
Short Name: **PayorCom** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether commercial insurance was used by the patient to pay for part or all of this admission. Commercial insurance refers to all indemnity (fee-for-service) carriers and Preferred Provider Organizations (PPOs), (e.g., Blue Cross and Blue Shield).

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Payor - Health Maintenance Organization *SeqNo:* 520
Short Name: **PayorHMO** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a Health Maintenance Organization (HMO) insurance was used by the patient to pay for part or all of this admission. HMO refers to a Health Maintenance Organization characterized by coverage that provides health care services for members on a pre-paid basis.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Payor - Non-U.S. Insurance *SeqNo:* 530
Short Name: **PayorNonUS** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether any non-U.S. insurance was used by the patient to pay for part or all of this admission.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Payor - None / Self *SeqNo:* 540
Short Name: **PayorNS** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether no insurance was used by the patient to pay for this admission. None refers to individuals with no or limited health insurance; thus, the individual is the payor regardless of ability to pay. Only mark "None" when "self" or "none" is denoted as the first insurance in the medical record.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

<i>Long Name:</i> Arrival Date	<i>SeqNo:</i> 550
<i>Short Name:</i> ArrivalDt	<i>Core:</i> Yes
<i>Section Name:</i> Hospitalization	<i>Harvest:</i> Yes

DBTableName AdultData

Definition: Indicate the date the patient arrived at your facility.

<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i> Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i> <i>NQFField:</i>
		<i>ModelField:</i> <i>PQRIField:</i>

Parent Long Name: *Format:* Date mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

<i>Long Name:</i> Arrival Time	<i>SeqNo:</i> 560
<i>Short Name:</i> ArrivalTm	<i>Core:</i> Yes
<i>Section Name:</i> Hospitalization	<i>Harvest:</i> Yes

DBTableName AdultData

Definition: Indicate the time the patient arrived at your facility.

If the patient came to your facility for an elective or outpatient procedure and the time was not documented, code the scheduled time of arrival.

<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i> Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i> <i>NQFField:</i>
		<i>ModelField:</i> <i>PQRIField:</i>

Parent Long Name: *Format:* Time in 24-hour hh:mm format

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Date of Admission *SeqNo:* 570
Short Name: **AdmitDt** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Date of Admission. For those patients who originally enter the hospital in an out-patient capacity (i.e., catheterization), the admit date is the date the patient's status changes to in-patient.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date mm/dd/yyyy
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Admit Source *SeqNo:* 580
Short Name: **AdmitSrc** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the source of admission for the patient to your facility.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Elective Admission	
2	Emergency Department	The patient came to the facility for this episode of care via the emergency department (excludes transfers from other facilities).
3	Transfer in from another acute care facility	The patient was transferred from another acute care facility (even if he/she was transferred to the emergency department) for this episode of care.
4	Other	The patient came to the facility for this episode of care by any other means. This includes transfers from non-acute care facilities.

Long Name: Other Hospital Performs Cardiac Surgery *SeqNo:* 590
Short Name: **OthHosCS** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: The transferring hospital or medical care facility has the necessary personnel and facilities to have been able to perform the cardiac surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Admit Source *Format:* Text (categorical values specified by STS)

ParentShortName: AdmitSrc *DataLength:*

ParentValue: = "Transfer in from another acute care facility" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Date of Surgery *SeqNo:* 610
Short Name: **SurgDt** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date of index cardiac surgical procedure. Index cardiac surgical procedure is defined as the initial major cardiac surgical procedure of the hospitalization.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Date of Discharge *SeqNo:* 620
Short Name: **DischDt** *Core:* Yes
Section Name: Hospitalization *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the patient was discharged from the hospital (acute care) even if the patient is going to a rehab or hospice or similar extended care unit within the same physical facility. If the patient died in the hospital, the discharge date is the date of death.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date mm/dd/yyyy

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Weight (kg) *SeqNo:* 630
Short Name: **WeightKg** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the weight of the patient in kilograms closest to the date of procedure.

LowValue: 10.0 *UsualRangeLow:* 40.0 *ACCFIELD:* Mapped - Definition only
HighValue: 250.0 *UsualRangeHigh:* 170.0 *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Height (cm) *SeqNo:* 640
Short Name: **HeightCm** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the height of the patient in centimeters.

LowValue: 20.0 *UsualRangeLow:* 122.0 *ACCField:* Mapped - Definition only
HighValue: 251.0 *UsualRangeHigh:* 213.0 *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Cigarette Smoker *SeqNo:* 650
Short Name: **CigSmoker** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient has smoked cigarettes anytime during the year prior to surgery.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cigarette Smoker Current *SeqNo:* 660
Short Name: **CigSmokerCurr** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient smoked cigarettes within two weeks prior to procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Cigarette Smoker *Format:* Text (categorical values specified by STS)

ParentShortName: CigSmoker *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Tobacco Use *SeqNo:* 661
Short Name: **OthTobUse** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Current or previous use of any tobacco product other than cigarettes, including cigars, pipes, and chewing tobacco.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition only
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Family History of Premature CAD *SeqNo:* 670
Short Name: **FHCAD** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient has/had any direct blood relatives (parents, siblings, children) who have had any of the following DIAGNOSED at age less than 55 years for male relatives or less than 65 years for female relatives:

1. Coronary Artery Disease (angina, previous CABG or PCI)
2. MI
3. Sudden cardiac death without obvious cause.

If the patient is adopted, or the family history is unavailable, code "No".

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and Coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: RF-Last Hematocrit *SeqNo:* 680
Short Name: **Hct** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the pre-operative Hematocrit level at the date and time closest to surgery but prior to anesthetic management (induction area or operating room).

LowValue: 1.0 *UsualRangeLow:* 39.0 *ACCFIELD:* Not mapped
HighValue: 99.9 *UsualRangeHigh:* 53.0 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: RF-Last WBC Count *SeqNo:* 690
Short Name: **WBC** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the pre-operative White Blood Cell (WBC) count closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue: 0.1 *UsualRangeLow:* 4.0 *ACCField:* Not mapped
HighValue: 99.9 *UsualRangeHigh:* 15.0 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: RF-Platelets *SeqNo:* 700
Short Name: **Platelets** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the platelet count closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue: 1000 *UsualRangeLow:* 150000 *ACCField:* Not mapped
HighValue: 900000 *UsualRangeHigh:* 400000 *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Integer

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: RF-INR *SeqNo:* 710
Short Name: **INR** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the International Normalized Ratio (INR) closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue: 0.5 *UsualRangeLow:* 0.9 *ACCFIELD:* Not mapped
HighValue: 30.0 *UsualRangeHigh:* 1.3 *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: RF-HIT Antibodies *SeqNo:* 711
Short Name: **HITAnti** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Heparin Induced Thrombocytopenia (HIT) is confirmed by antibody testing.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Yes	Positive antibody testing
2	No	Negative antibody testing
3	Not Applicable	Antibody testing not performed

Long Name: RF-Total Bilirubin *SeqNo:* 720
Short Name: **TotBlrbn** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total Bilirubin closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue: 0.1 *UsualRangeLow:* 0.2 *ACCField:* Not mapped
HighValue: 50.0 *UsualRangeHigh:* 1.3 *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: RF-Total Albumin *SeqNo:* 730
Short Name: **TotAlbumin** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total albumin closest to the date and time prior to surgery but prior to anesthetic management (induction area or operating room).

LowValue: 1.0 *UsualRangeLow:* 3.5 *ACCField:* Not mapped
HighValue: 10.0 *UsualRangeHigh:* 5.0 *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: RF-Last A1c Level *SeqNo:* 740
Short Name: **A1cLvl** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the pre-operative HbA1c level closest to the date and time prior surgery but prior to anesthetic management (induction area or operating room).

LowValue: 1.0 *UsualRangeLow:* 4.0 *ACCField:* Not mapped
HighValue: 20.0 *UsualRangeHigh:* 8.0 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: RF-Last Creat Level *SeqNo:* 750
Short Name: **CreatLst** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the creatinine level closest to the date and time prior surgery but prior to anesthetic management (induction area or operating room).

A creatinine level should be collected on all patients, even if they have no prior history. A creatinine value is a high predictor of a patient's outcome and is used in the predicted risk models.

LowValue: 0.1 *UsualRangeLow:* 0.1 *ACCField:* Not mapped
HighValue: 30.0 *UsualRangeHigh:* 9.0 *ReportField:* Yes *NQFField:* Yes
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: RF-Diabetes *SeqNo:* 780
Short Name: **Diabetes** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient has a history of diabetes diagnosed and/or treated by a physician. The American Diabetes Association criteria include documentation of the following:

1. A1c >=6.5%; or
2. Fasting plasma glucose >=126 mg/dl (7.0 mmol/l); or
3. Two-hour plasma glucose >=200 mg/dl (11.1 mmol/l) during an oral glucose tolerance test; or
4. In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose >=200 mg/dl (11.1 mmol/l)

It does not include gestational diabetes.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Diabetes-Control *SeqNo:* 790
Short Name: **DiabCtrl** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the control method the patient presented with on admission. Patients placed on a preprocedure diabetic pathway of insulin drip at admission but were previously controlled by diet or oral method are not coded as insulin treated.
 Choose the most aggressive therapy used prior to admission.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: RF-Diabetes *Format:* Text (categorical values specified by STS)

ParentShortName: Diabetes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	None	No treatment for diabetes.
2	Diet	Diet treatment only.
3	Oral	Oral agent treatment (includes oral agent with/without diet treatment).
4	Insulin	Insulin treatment (includes any combination with insulin).
5	Other	Other adjunctive therapy

Long Name: RF-Dyslipidemia *SeqNo:* 800
Short Name: **Dyslip** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Current or previous diagnosis of dyslipidemia per the National Cholesterol Education Program criteria, defined as any 1 of the following:
 - Total cholesterol greater than 200 mg/dl (5.18 mmol/l)
 - Low-density lipoprotein (LDL) greater than or equal to 130 mg/dl (3.37 mmol/l)
 - High-density lipoprotein (HDL) less than 40 mg/dl (1.04 mmol/l) in men and less than 50 mg/dl (1.30 mmol/l) in women

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No

ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Renal Fail-Dialysis *SeqNo:* 810
Short Name: **Dialysis** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient is currently undergoing dialysis.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes

ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-MELD Score *SeqNo:* 815
Short Name: **MELDS**cr *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: MELD score value calculated by software to indicate liver disease.
LowValue: -50.0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 150.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* Calculated

Long Name: RF-Hypertension *SeqNo:* 820
Short Name: **Hypertn** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the patient has a diagnosis of hypertension, documented by one of the following:
 a. Documented history of hypertension diagnosed and treated with medication, diet and/or exercise
 b. Prior documentation of blood pressure >140 mmHg systolic or 90 mmHg diastolic for patients without diabetes or chronic kidney disease, or prior documentation of blood pressure >130 mmHg systolic or 80 mmHg diastolic on at least 2 occasions for patients with diabetes or chronic kidney disease
 c. Currently on pharmacologic therapy to control hypertension.
LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Infect Endocard *SeqNo:* 830
Short Name: **InfEndo** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of infectious endocarditis documented by one of the following:

1. positive blood cultures
2. vegetation on echocardiography and/or other diagnostic modality
3. documented history of infectious endocarditis

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Infect Endocard Type *SeqNo:* 840
Short Name: **InfEndTy** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of endocarditis the patient has. If the patient is currently being treated for endocarditis, the disease is considered active. If no antibiotic medication (other than prophylactic medication) is being given at the time of surgery, then the infection is considered treated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: RF-Infect Endocard *Format:* Text (categorical values specified by STS)

ParentShortName: InfEndo *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Treated

2 Active

Long Name: RF-Infect Endocard Culture *SeqNo:* 850
Short Name: **InfEndCult** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: Indicate culture results.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: RF-Infect Endocard *Format:* Text (categorical values specified by STS)
ParentShortName: InfEndo *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Culture negative
2	Staphylococcus aureus
3	Streptococcus species
4	Coagulase negative staphylococcus
5	Enterococcus species
6	Fungal
7	Other

Long Name: RF-Chronic Lung Dis *SeqNo:* 860
Short Name: **ChrLungD** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has chronic lung disease, and the severity level according to the following classification:
 No;
 Mild: FEV1 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy.
 Moderate: FEV1 50% to 59% of predicted, and/or on chronic steroid therapy aimed at lung disease.
 Severe: FEV1 <50% predicted, and/or Room Air pO2 < 60 or Room Air pCO2 > 50.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Mild
3	Moderate
4	Severe

Long Name: RF-Pulmonary Function Test *SeqNo:* 880
Short Name: **PFT** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether pulmonary function tests were performed.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
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- 1 Yes
- 2 No

Long Name: RF-Forced Expiratory Volume Predicted *SeqNo:* 890
Short Name: **FEV1** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the FEV1 % predicted from the most recent pulmonary function test prior to procedure.
LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: RF-Pulmonary Function Test *Format:* Integer
ParentShortName: PFT *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: DLCO Test Performed *SeqNo:* 892
Short Name: **DLCO** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate whether a lung diffusion test (DLCO) was performed.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: RF-Pulmonary Function Test *Format:* Text (categorical values specified by STS)
ParentShortName: PFT *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: DLCO Predicted *SeqNo:* 893
Short Name: **DLCOPred** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the % predicted DLCO value obtained for the patient.

LowValue: 10 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 150 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: DLCO Test Performed *Format:* Integer

ParentShortName: DLCO *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: RF-Arterial Blood Gas *SeqNo:* 900
Short Name: **ABG** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a room-air arterial blood gas was performed prior to surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Oxygen Level *SeqNo:* 910
Short Name: **PO2** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: Indicate PO2 result on most recent room air arterial blood gas prior to procedure.
LowValue: 40.0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 500.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: RF-Arterial Blood Gas *Format:* Real
ParentShortName: ABG *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: RF-Carbon Dioxide Level *SeqNo:* 920
Short Name: **PCO2** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: Indicate PCO2 on most recent room air blood gas prior to procedure.
LowValue: 20.0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 90.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: RF-Arterial Blood Gas *Format:* Real
ParentShortName: ABG *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: RF-Home Oxygen *SeqNo:* 930
Short Name: **HmO2** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient uses supplemental oxygen at home.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Inhaled Medication or Oral Bronchodilator Therapy *SeqNo:* 940
Short Name: **BDTx** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether oral and/or inhaled bronchodilator or inhaled (not oral or IV) steroid medications were in use by the patient routinely prior to this procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Sleep Apnea *SeqNo:* 950
Short Name: **SlpApn** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient has a diagnosis of sleep apnea and uses BiPAP (Bilevel Positive Airway Pressure) therapy.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Liver Disease *SeqNo:* 960
Short Name: **LiverDis** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of hepatitis B, hepatitis C, cirrhosis, portal hypertension, esophageal varices, chronic alcohol abuse or congestive hepatopathy.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

<i>Long Name:</i>	RF-Immunocompromise	<i>SeqNo:</i>	970
<i>Short Name:</i>	ImmSupp	<i>Core:</i>	Yes
<i>Section Name:</i>	Risk Factors	<i>Harvest:</i>	Yes

DBTableName AdultData

Definition: Indicate whether immunocompromise is present due to immunosuppressive medication therapy within 30 days preceding the operative procedure or existing medical condition (see training manual). This includes, but is not limited to systemic steroid therapy, anti-rejection medications and chemotherapy. This does not include topical steroid applications, one time systemic therapy, inhaled steroid therapy or preoperative protocol.

<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	Yes
		<i>PQRIField:</i>	No

<i>Parent Long Name:</i>	<i>Format:</i>	Text (categorical values specified by STS)
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<i>ParentShortName:</i>	<i>DataLength:</i>
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<i>ParentValue:</i>	<i>Data Source:</i>	User
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Harvest Codes:

<u>Code:</u>	<u>Value:</u>
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1	Yes
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2	No
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<i>Long Name:</i>	RF-Peripheral Arterial Disease	<i>SeqNo:</i>	980
<i>Short Name:</i>	PVD	<i>Core:</i>	Yes
<i>Section Name:</i>	Risk Factors	<i>Harvest:</i>	Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of peripheral arterial disease (includes upper and lower extremity, renal, mesenteric, and abdominal aortic systems). This can include:

1. Claudication , either with exertion or at rest,
2. Amputation for arterial vascular insufficiency,
3. Vascular reconstruction, bypass surgery, or percutaneous intervention to the extremities (excluding dialysis fistulas and vein stripping),
4. Documented aortic aneurysm with or without repair,
5. Positive noninvasive test (e.g., ankle brachial index \leq 0.9, ultrasound, magnetic resonance or computed tomography imaging of $>$ 50% diameter stenosis in any peripheral artery, i.e., renal, subclavian, femoral, iliac) or angiographic imaging

Peripheral arterial disease excludes disease in the carotid or cerebrovascular arteries.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No

ModelField: Yes *PQRIField:* No

Parent Long Name:

Format: Text (categorical values specified by STS)

ParentShortName:

DataLength:

ParentValue:

Data Source: User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Coma *SeqNo:* 990
Short Name: **CVDComa** *Core:* No
Section Name: Risk Factors *Harvest:* No

DBTableName AdultData

Definition: Indicate whether the patient has a history of Unresponsive Coma greater than 24 hours: Patient experienced complete mental unresponsiveness and no evidence of psychological or physiologically appropriate responses to stimulation.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: RF-Unresponsive Neurologic State *SeqNo:* 1000
Short Name: **UnrespStat** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of non-medically induced, unresponsive state within 24 hours of the time of surgery. Patient experienced complete mental unresponsiveness and no evidence of psychological or physiologically appropriate responses to stimulation, includes patients who experience sudden cardiac death.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: RF-Syncope *SeqNo:* 1001
Short Name: **Syncope** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a sudden loss of consciousness with loss of postural tone, not related to anesthesia, with spontaneous recovery and believed to be related to cardiac condition. Capture events occurring within the past one year as reported by patient or observer. Patient may experience syncope when supine.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Cerebrovascular Dis *SeqNo:* 1010
Short Name: **CVD** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has Cerebro-Vascular Disease, documented by any one of the following: CVA (symptoms > 24 hrs after onset, presumed to be from vascular etiology); TIA (recovery within 24 hrs); Non-invasive carotid test with > 79% diameter occlusion.; or Prior carotid surgery or stenting or prior cerebral aneurysm clipping or coil. Does not include neurological disease processes such as metabolic and/or anoxic ischemic encephalopathy.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: RF-Prior CVA *SeqNo:* 1020
Short Name: **CVA** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient has a history of stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood flow to the brain) that did not resolve within 24 hours.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Prior CVA-When *SeqNo:* 1030
Short Name: **CVAWhen** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData

Definition: Indicate when the CVA events occurred. Those events occurring within two weeks of the surgical procedure are considered recent, while all others are considered remote.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: RF-Prior CVA *Format:* Text (categorical values specified by STS)

ParentShortName: CVA *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Recent (<=2 wk.)
2	Remote (>2 wk.)

Long Name: RF-CVD RIND *SeqNo:* 1040
Short Name: **CVDRIND** *Core:* No
Section Name: Risk Factors *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the patient has a history of a Reversible Ischemic Neurologic Deficit (RIND): Patient has a history of loss of neurological function with symptoms at least 24 hours after onset but with complete return of function within 72 hours.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)
ParentShortName: CVD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

Long Name: RF-CVD TIA *SeqNo:* 1050
Short Name: **CVDTIA** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the patient has a history of a Transient Ischemic Attack (TIA): Patient has a history of loss of neurological function that was abrupt in onset but with complete return of function within 24 hours.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)
ParentShortName: CVD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

<i>Long Name:</i>	RF-CVD NonInvas >75%	<i>SeqNo:</i>	1060
<i>Short Name:</i>	CVDNInvas	<i>Core:</i>	No
<i>Section Name:</i>	Risk Factors	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether the patient has a history of a Non-invasive/invasive carotid test with greater than 75% occlusion.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	No
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	RF-Cerebrovascular Dis	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	CVD	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	

<i>Long Name:</i>	RF-CVD Carotid Stenosis	<i>SeqNo:</i>	1070
<i>Short Name:</i>	CVDCarSten	<i>Core:</i>	Yes
<i>Section Name:</i>	Risk Factors	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate which carotid artery was determined from any diagnostic test to be more than 79% stenotic.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	<i>NQFField:</i>
		<i>ModelField:</i>	<i>PQRIField:</i>
<i>Parent Long Name:</i>	RF-Cerebrovascular Dis	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	CVD	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	None	
	2	Right	
	3	Left	
	4	Both	

Long Name: RF-CVD Carotid Stenosis - Right *SeqNo:* 1071
Short Name: **CVDStenRt** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the severity of stenosis reported on the right carotid artery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: RF-CVD Carotid Stenosis *Format:* Text (categorical values specified by STS)

ParentShortName: CVDCarSten *DataLength:*

ParentValue: = "Right" or "Both" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	80% to 99%
2	100 %

Long Name: RF-CVD Carotid Stenosis - Left *SeqNo:* 1072
Short Name: **CVDStenLft** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the severity of stenosis reported on the left carotid artery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: RF-CVD Carotid Stenosis *Format:* Text (categorical values specified by STS)

ParentShortName: CVDCarSten *DataLength:*

ParentValue: = "Left" or "Both" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	80% to 99%
2	100%

Long Name: RF-CVD Prior Carotid Surgery *SeqNo:* 1080
Short Name: **CVDPCarSurg** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of previous carotid artery surgery and/or stenting.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: RF-Cerebrovascular Dis *Format:* Text (categorical values specified by STS)

ParentShortName: CVD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Illicit Drug Use *SeqNo:* 1130
Short Name: **IVDrugAb** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient has a history of illicit drug use such as heroin, marijuana, cocaine, or meth, regardless of route of administration. Do not include rare historical use.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Alcohol Use *SeqNo:* 1131
Short Name: **Alcohol** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Specify alcohol consumption history.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	<= 1 drink/week
2	2-7 drinks/week
3	>= 8 drinks/week

Long Name: RF-Pneumonia *SeqNo:* 1140
Short Name: **Pneumonia** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient has a recent or remote history of pneumonia.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	No	
2	Recent	Within 1 month of procedure
3	Remote	More than 1 month prior to procedure

Long Name: RF-Mediastinal Radiation *SeqNo:* 1150
Short Name: **MediastRad** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient has a history of radiation therapy to the mediastinum or chest.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Cancer Within 5 Years *SeqNo:* 1160
Short Name: **Cancer** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has a history of cancer diagnosed within 5 years of procedure. Do not capture low grade skin cancers such as basal cell or squamous cell carcinoma.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Five Meter Walk Test Done *SeqNo:* 1161
Short Name: **FiveMWalkTest** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the five meter walk test was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: RF-Five Meter Walk Time 1 *SeqNo:* 1170
Short Name: **FiveMWalk1** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the first of three tests.

LowValue: 1 *UsualRangeLow:* 2 *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* 20 *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: RF-Five Meter Walk Test Done *Format:* Integer

ParentShortName: FiveMWalkTest *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: RF-Five Meter Walk Time 2 *SeqNo:* 1180
Short Name: **FiveMWalk2** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the second of three tests.
LowValue: 1 *UsualRangeLow:* 2 *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* 20 *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: RF-Five Meter Walk Test
Done *Format:* Integer
ParentShortName: FiveMWalkTest *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: RF-Five Meter Walk Time 3 *SeqNo:* 1190
Short Name: **FiveMWalk3** *Core:* Yes
Section Name: Risk Factors *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the time in seconds it takes the patient to walk 5 meters for the third of three tests.
LowValue: 1 *UsualRangeLow:* 2 *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* 20 *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: RF-Five Meter Walk Test
Done *Format:* Integer
ParentShortName: FiveMWalkTest *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Prev Cardiac Intervent *SeqNo:* 1200
Short Name: **PrCVInt** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has undergone any previous cardiovascular intervention, either surgical or non-surgical, which may include those done during the current admission. This may include hybrid procedures.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Prev CAB *SeqNo:* 1215
Short Name: **PrCAB** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a previous Coronary Bypass Graft prior to the current admission.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: Yes *PQRIField:* Yes

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Prev Valve *SeqNo:* 1216
Short Name: **PrValve** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a previous surgical replacement and/or surgical repair of a cardiac valve. This may also include percutaneous valve procedures.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No

ModelField: Yes *PQRIField:* Yes

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Aortic Valve Replacement - Surgical *SeqNo:* 1220
Short Name: **PrevProcAVReplace** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical aortic valve replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Aortic Valve Repair - Surgical *SeqNo:* 1230
Short Name: **PrevProcAVRepair** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical aortic valve repair.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Mitral Valve Replacement - Surgical *SeqNo:* 1240
Short Name: **PrevProcMVReplace** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical mitral valve replacement.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Mitral Valve Repair - Surgical *SeqNo:* 1250
Short Name: **PrevProcMVRepair** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical mitral valve repair.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Tricuspid Valve Replacement - Surgical *SeqNo:* 1260
Short Name: **PrevProcTVReplace** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical tricuspid valve replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Tricuspid Valve Repair - Surgical *SeqNo:* 1270
Short Name: **PrevProcTVRepair** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical tricuspid valve repair.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous procedure - Pulmonic Valve Repair / Replacement - Surgical *SeqNo:* 1280
Short Name: **PrevProcPV** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a surgical pulmonic valve repair or replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous Procedure - Aortic Valve Balloon Valvuloplasty *SeqNo:* 1285
Short Name: **PrevProcAVBall** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included an aortic balloon valvuloplasty.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Previous Procedure - Mitral Valve Balloon Valvuloplasty *SeqNo:* 1290
Short Name: **PrevProcMVBall** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a mitral valve balloon valvuloplasty.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Previous Procedure - Transcatheter Valve Replacement *SeqNo:* 1300
Short Name: **PrevProcTCVRep** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a transcatheter valve replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous Procedure - Percutaneous Valve Repair *SeqNo:* 1310
Short Name: **PrevProcPercVRepair** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous procedure included a percutaneous valve repair.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Indication for Reoperation *SeqNo:* 1340
Short Name: **IndReop** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the primary reason for repeat valve procedure.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)
ParentShortName: PrValve *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Structural Prosthetic Valve Deterioration	Wear, fracture, poppet escape, calcification, leaflet tear, stent creep
2	Non-structural prosthetic valve dysfunction	entrapment by pannus, paravalvular leak, obstruction, inappropriate sizing,
3	Prosthetic valve endocarditis	Infection, active or treated
4	Valve Thrombosis	
5	Failed Repair	
6	Repeat valve procedure on a different valve	
7	Other	

Long Name: Non-Structural Valve Dysfunction *SeqNo:* 1350
Short Name: **NonStVDys** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the primary type of nonstructural valve dysfunction.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Indication for Reoperation *Format:* Text (categorical values specified by STS)

ParentShortName: IndReop *DataLength:*

ParentValue: = "Non-structural prosthetic valve dysfunction" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Paravalvular Leak
- 2 Hemolysis
- 3 Entrapment by pannus, tissue, or suture
- 4 Sizing or positioning issue
- 5 Other

Long Name: Exact Date of Previous Valve Procedure Known *SeqNo:* 1410
Short Name: **PrValDtKnown** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the exact date of the previous valve procedure is known.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Prev Valve *Format:* Text (categorical values specified by STS)

ParentShortName: PrValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Date of Previous Valve Procedure *SeqNo:* 1420
Short Name: **PrValveDate** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the date on which the previous valve procedure was performed.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Exact Date of Previous Valve Procedure Known *Format:* Date mm/dd/yyyy
ParentShortName: PrValDtKnown *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Estimate Number of Months Since Previous Valve Procedure *SeqNo:* 1430
Short Name: **PrValveMonths** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the best estimate of the number of months since the most recent prior valve procedure was performed.
LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 240 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Exact Date of Previous Valve Procedure Known *Format:* Integer
ParentShortName: PrValDtKnown *DataLength:*
ParentValue: = "No" *Data Source:* User

Long Name: Prev Oth Card *SeqNo:* 1440
Short Name: **PrOthCar** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient had a previous intrapericardial or great vessel (e.g., aorta, superior vena cava, inferior vena cava, pulmonary arteries and veins) procedure performed. This may include, but is not limited to LVA, acquired VSD, SVR, TMR, cardiac trauma, pericardial window, pericardiectomy, cardiac tumor, myectomy or heart transplant.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous Arrhythmia Surgery *SeqNo:* 1445
Short Name: **POArr** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had any other arrhythmia surgery (e.g., maze procedure).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Prev Oth Card *Format:* Text (categorical values specified by STS)

ParentShortName: PrOthCar *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous Congenital *SeqNo:* 1450
Short Name: **PrOthCongen** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient had a previous congenital heart surgery and/or percutaneous procedure performed. May include, but is not limited to VSD, ASD, TOF and PFO.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Prev Oth Card-ICD *SeqNo:* 1460
Short Name: **PrOCAICD** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a previous implant of an Implantable Cardioverter/Defibrillator. This does not include lead placement only.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Prev Oth Card-Pacemaker *SeqNo:* 1470
Short Name: **PrOCPace** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous permanent pacemaker was placed anytime prior to this surgical procedure. This does not include lead placement only.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Prev Oth Card-PCI *SeqNo:* 1480
Short Name: **POCPCI** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a previous Percutaneous Cardiac Intervention (PCI) was performed any time prior to this surgical procedure. PCI refers to those treatment procedures that unblock narrowed coronary arteries without performing surgery. PCI may include, but is not limited to:

1. Balloon Catheter Angioplasty, Percutaneous Transluminal Coronary Angioplasty (PTCA)
2. Rotational Atherectomy
3. Directional Atherectomy
4. Extraction Atherectomy
5. Laser Atherectomy
6. Intracoronary Stent Placement

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Prev Oth Card-PCI-Within This Episode of Care *SeqNo:* 1481
Short Name: **POCPCIWhen** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the previous Percutaneous Cardiac Intervention (PCI) was performed within this episode of care.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Prev Oth Card-PCI *Format:* Text (categorical values specified by STS)

ParentShortName: POCPCI *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|--|
| 1 | Yes, at this facility |
| 2 | Yes, at some other acute care facility |
| 3 | No |

Long Name: Prev Oth Card-PCI-Indication For Surgery *SeqNo:* 1490
Short Name: **POCPCIndSurg** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Select the indication for surgery following the Percutaneous Cardiac Intervention (PCI).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Prev Oth Card-PCI-Within This Episode of Care *Format:* Text (categorical values specified by STS)

ParentShortName: POCPCIWhen *DataLength:*

ParentValue: = "Yes, at this facility" or "Yes, at some other acute care facility" *Data Source:* User

Harvest Codes and Value Definitions:

- | <u>Code:</u> | <u>Value:</u> | <u>Definition:</u> |
|--------------|------------------|---|
| 1 | PCI Complication | Complication during PCI necessitating surgical intervention such as dissection or acute occlusion |

2	PCI Failure without Clinical Deterioration	PCI failed to yield expected and/or desired results, patient condition did not deteriorate.
3	PCI/CABG Hybrid Procedure	Planned Hybrid Procedure

Long Name: Prev Oth Card-PCI-Stent *SeqNo:* 1500
Short Name: **POCPCIS†** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether an intracoronary stent was used during the previous Percutaneous Cardiac Intervention (PCI).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Oth Card-PCI *Format:* Text (categorical values specified by STS)

ParentShortName: POCPCI *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Prev Oth Card-PCI-Stent Type *SeqNo:* 1510
Short Name: **POCPCIS†Ty** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes

DBTableName AdultData

Definition: Indicate type of intracoronary stent placed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Oth Card-PCI-Stent *Format:* Text (categorical values specified by STS)

ParentShortName: POCPCIS† *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Bare metal
2	Drug-eluting

3 Unknown

Long Name: Prev Oth Card-PCI-Interval *SeqNo:* 1520
Short Name: **POCPCIIn** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes
DBTableName AdultData

Definition: Indicate the interval of time between the previous PCI and the current surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: Prev Oth Card-PCI *Format:* Text (categorical values specified by STS)

ParentShortName: POCPCI *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | <= 6 Hours |
| 2 | > 6 Hours |

Long Name: Prev Oth Card-Other *SeqNo:* 1530
Short Name: **POCO** *Core:* Yes
Section Name: Previous Cardiac Interventions *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient has undergone any other previous cardiovascular intervention.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Prev Cardiac Intervent *Format:* Text (categorical values specified by STS)

ParentShortName: PrCVInt *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Prior MI *SeqNo:* 1540
Short Name: **PrevMI** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient has had at least one documented previous myocardial infarction at any time prior to this surgery. (Refer to training manual for MI definition.)

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: MI-When *SeqNo:* 1550
Short Name: **MIWhen** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the time period between the last documented myocardial infarction and surgery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: Prior MI *Format:* Text (categorical values specified by STS)

ParentShortName: PrevMI *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 <=6 Hrs
- 2 >6 Hrs but <24 Hrs
- 3 1 to 7 Days
- 4 8 to 21 Days
- 5 >21 Days

Long Name: Anginal Classification within 2 weeks *SeqNo:* 1570
Short Name: **AnginalClass** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the patients anginal classification or symptom status within the past 2 weeks.
 The anginal classification or symptom status is classified as the highest grade of angina or chest pain by the Canadian Cardiovascular Angina Classification System (CCA).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	No Symptoms, No Angina	The patient has no symptoms, no angina.
2	CCA I	Ordinary physical activity does not cause angina; for example walking or climbing stairs, angina occurs with strenuous or rapid or prolonged exertion at work or recreation.
3	CCA II	Slight limitation of ordinary activity; for example, angina occurs walking or stair climbing after meals, in cold, in wind, under emotional stress or only during the few hours after awakening, walking more than two blocks on the level or climbing more than one flight of ordinary stairs at a normal pace and in normal conditions.
4	CCA III	Marked limitation of ordinary activity; for example, angina occurs walking one or two blocks on the level or climbing one flight of stairs in normal conditions and at a normal pace.
5	CCA IV	Inability to carry on any physical activity without discomfort - angina syndrome may be present at rest.

Long Name: Heart Failure within 2 weeks *SeqNo:* 1580
Short Name: CHF *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if there is physician documentation or report that the patient has been in a state of heart failure within the past 2 weeks.

Heart failure is defined as physician documentation or report of any of the following clinical symptoms of heart failure described as unusual dyspnea on light exertion, recurrent dyspnea occurring in the supine position, fluid retention; or the description of rales, jugular venous distension, pulmonary edema on physical exam, or pulmonary edema on chest x-ray presumed to be cardiac dysfunction.

A low ejection fraction alone, without clinical evidence of heart failure does not qualify as heart failure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Classification-NYHA *SeqNo:* 1585
Short Name: **ClassNYH** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the patient's worst dyspnea or functional class, coded as the New York Heart Association (NYHA) classification within the past 2 weeks.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No

ModelField: Yes *PQRIField:* No

Parent Long Name: Heart Failure within 2 weeks *Format:* Text (categorical values specified by STS)

ParentShortName: CHF *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

Code: Value:

1 Class I

Definition:

Patient has cardiac disease but without resulting limitations of ordinary physical activity. Ordinary physical activity (e.g., walking several blocks or climbing stairs) does not cause undue fatigue, palpitation, dyspnea, or anginal pain. Limiting symptoms may occur with marked exertion.

2 Class II

Patient has cardiac disease resulting in slight limitation of ordinary physical activity. Patient is comfortable at rest. Ordinary physical activity such as walking more than two blocks or climbing more than one flight of stairs results in limiting symptoms (e.g., fatigue, palpitation, dyspnea, or anginal pain).

3 Class III

Patient has cardiac disease resulting in marked limitation of physical activity. Patient is comfortable at rest. Less than ordinary physical activity (e.g., walking one to two level blocks or climbing one flight of stairs) causes fatigue, palpitation, dyspnea, or anginal pain.

4 Class IV

Patient has dyspnea at rest that increases with any physical activity. Patient has cardiac disease resulting in inability to perform any physical activity without discomfort. Symptoms may be present even at rest. If any physical activity is undertaken, discomfort is increased.

Long Name: Prior Heart failure *SeqNo:* 1590
Short Name: **PriorHF** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate history of heart failure occurring more than 2 weeks prior to current episode of care. A previous hospital admission with principal diagnosis of heart failure is considered evidence of heart failure history but is not essential.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cardiac Presentation on Admission *SeqNo:* 1610
Short Name: **CardPres** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of angina present prior to this procedure.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	No Symptoms, no Angina	No Symptoms, no angina.
2	Symptoms Unlikely to be Ischemia	Pain, pressure or discomfort in the chest, neck or arms not clearly exertional or not otherwise consistent with pain or discomfort of myocardial ischemic origin. This includes patients with non-cardiac pain (e.g., pulmonary embolism, musculoskeletal, or esophageal discomfort),

		or cardiac pain not caused by myocardial ischemia (e.g., acute pericarditis).
3	Stable Angina	Stable Angina: Angina without a change in frequency or pattern for the six weeks prior to this surgical intervention. Angina is controlled by rest and/or oral or transcutaneous medications.
4	Unstable Angina	Unstable Angina - There are three principal presentations of unstable angina: 1) rest angina, 2) new-onset (less than 2 months) angina, and 3) increasing angina (in intensity, duration and/or frequency).
5	Non-ST Elevation MI (Non-STEMI)	Non-ST Elevation MI (Non-STEMI) - non-ST elevation myocardial infarction as documented in the medical record.
6	ST Elevation MI (STEMI)	STEMIs are characterized by the presence of both criteria: A. ECG evidence of STEMI B. Cardiac biomarkers

Long Name: Cardiogenic Shock *SeqNo:* 1620
Short Name: **CarShock** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was, at the time of procedure, in a clinical state of end organ hypoperfusion due to cardiac failure according to the following criteria:
 persistant hypotension (Systolic BP < 80-90 or mean arterial pressure 30 mmhg lower than baseline)
 and severe reduction in Cardiac Index (< 1.8 without support or <2.2 with support).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Resuscitation *SeqNo:* 1630
Short Name: **Resusc** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient required cardiopulmonary resuscitation within one hour before the start of the operative procedure which includes the institution of anesthetic management.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Arrhythmia *SeqNo:* 1640
Short Name: **Arrhyth** *Core:* No
Section Name: Preoperative Cardiac Status *Harvest:* No

DBTableName AdultData

Definition: Indicate whether there is a history of preoperative arrhythmia (sustained ventricular tachycardia, ventricular fibrillation, atrial fibrillation, atrial flutter, third degree heart block) that has been treated with any of the following modalities:

1. ablation therapy
2. AICD
3. pacemaker
4. pharmacological treatment
5. electrocardioversion

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
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1	Yes
2	No

Long Name: Arrhythmia When *SeqNo:* 1650
Short Name: **ArrhythWhen** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate when the patient had a preoperative history of arrhythmia (sustained ventricular tachycardia, ventricular fibrillation, or sudden cardiac death presumed to be lethal arrhythmia, atrial fibrillation, atrial flutter, third degree heart block, second degree heart block, sick sinus syndrome) that has been treated with any of the following modalities:

1. ablation therapy
2. AICD
3. pacemaker
4. pharmacological treatment
5. electrocardioversion
6. defibrillation

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	None	
2	Remote	More than 30 days prior to procedure.
3	Recent	Within 30 days prior to procedure.

Long Name: Arrhythmia Type-Vtach/Vfib *SeqNo:* 1660
Short Name: **ArrhyVtach** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether sustained ventricular tachycardia or fibrillation was present within 30 days of the procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Arrhythmia When *Format:* Text (categorical values specified by STS)

ParentShortName: ArrhythWhen *DataLength:*

ParentValue: = "Recent" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Arrhythmia Type-Second Degree Heart Block *SeqNo:* 1670
Short Name: **ArrhyVtachHrtBlk** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Second Degree Heart Block was present within 30 days of the procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Arrhythmia When *Format:* Text (categorical values specified by STS)

ParentShortName: ArrhythWhen *DataLength:*

ParentValue: = "Recent" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Arrhythmia Type-Sick Sinus Syndrome *SeqNo:* 1680
Short Name: **ArrhyVtachSicSinSyn** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Sick Sinus Syndrome was present within 30 days of the procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Arrhythmia When *Format:* Text (categorical values specified by STS)

ParentShortName: ArrhythWhen *DataLength:*

ParentValue: = "Recent" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Arrhythmia Type-Third Degree Heart Block *SeqNo:* 1690
Short Name: **ArrhyTHB** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether third degree heart block was present within thirty days of the procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Arrhythmia When *Format:* Text (categorical values specified by STS)

ParentShortName: ArrhythWhen *DataLength:*

ParentValue: = "Recent" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Arrhythmia Type-Afib/Aflutter *SeqNo:* 1700
Short Name: **ArrhyAfib** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether atrial fibrillation or flutter was present within thirty days of the procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: Arrhythmia When *Format:* Text (categorical values specified by STS)

ParentShortName: ArrhythWhen *DataLength:*

ParentValue: = "Recent" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Afib/Aflutter Type *SeqNo:* 1701
Short Name: **ArrhyAfibTy** *Core:* Yes
Section Name: Preoperative Cardiac Status *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether preoperative AFib/Aflutter is paroxysmal or continuous/persistent.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Arrhythmia Type-Afib/Aflutter *Format:* Text (categorical values specified by STS)

ParentShortName: ArrhyAfib *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Paroxysmal	I.e., sporadic
2	Continuous/persistent	Persistent longstanding permanent or continuous

Long Name: Meds-Beta Blockers *SeqNo:* 1710
Short Name: **MedBeta** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received beta blockers within 24 hours preceding surgery, or if beta blocker was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No
3	Contraindicated

Long Name: Meds-ACE or ARB Inhibitors *SeqNo:* 1720
Short Name: **MedACEI** *Core:* No
Section Name: Preoperative Medications *Harvest:* No

DBTableName AdultData

Definition: Indicate whether the patient received ACE or ARB Inhibitors within 24 hours preceding surgery, or if ACE or ARB Inhibitor was contraindicated or not indicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

3 Contraindicated / Not Indicated

Long Name: Meds-ACE Inhibitors or ARB Within 48 Hours *SeqNo:* 1730
Short Name: **MedACEI48** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received ACE Inhibitors or ARB within 48 hours preceding surgery (e.g., if indicated for LV dysfunction or acute MI).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Meds-Nitrates-I.V. *SeqNo:* 1740
Short Name: **MedNitIV** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received IV Nitrates within 24 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Meds-Anticoagulants *SeqNo:* 1750
Short Name: **MedACoag** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received IV and/or subq anticoagulants within 48 hours preceding surgery.
 Do NOT include Coumadin or one-time boluses of Heparin.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Meds-Anticoagulants-Medication Name *SeqNo:* 1760
Short Name: **MedACMN** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the IV and/or subq anticoagulant the patient received within 48 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Meds-Anticoagulants *Format:* Text (categorical values specified by STS)

ParentShortName: MedACoag *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

Code: Value:

- 1 Heparin (Unfractionated)
- 2 Heparin (Low Molecular)
- 3 Thrombin Inhibitors

Definition:

Thrombin inhibitors include bivalhirudin or argatroban.

9 Other

Long Name: Meds-Preoperative Antiarrhythmics *SeqNo:* 1770
Short Name: **MedAArrhy** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was on antiarrhythmics preoperatively.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Coumadin *SeqNo:* 1780
Short Name: **MedCoum** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received Coumadin within 24 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Inotropes *SeqNo:* 1790
Short Name: **MedInotr** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received IV inotropic agents within 48 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Meds-Steroids *SeqNo:* 1800
Short Name: **MedSter** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was taking steroids within 24 hours of surgery. This does not include a one time dose related to prophylaxis therapy (i.e. IV dye exposure for cath procedure or surgery pre-induction period). Non-systemic medications are not included in this category (i.e., nasal sprays, topical creams).

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Meds-Aspirin *SeqNo:* 1820
Short Name: **MedASA** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received Aspirin or Ecotrin within 5 days preceding surgery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Lipid Lowering *SeqNo:* 1830
Short Name: **MedLipid** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient received lipid lowering medication within 24 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Meds-Lipid Lowering-Medication Type *SeqNo:* 1840
Short Name: **MedLipMN** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of lipid lowering medication the patient received within 24 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Meds-Lipid Lowering *Format:* Text (categorical values specified by STS)

ParentShortName: MedLipid *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Statin
2	Non-statin
3	Both

Long Name: Meds-ADP Inhibitors Within Five Days *SeqNo:* 1850
Short Name: **MedADP5Days** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has received ADP Inhibitors within 5 days preceding surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Meds-ADP Inhibitors Discontinuation *SeqNo:* 1860
Short Name: **MedADPIDis** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of days prior to surgery ADP Inhibitor use was discontinued. If less than 24 hours, enter "0".

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 5 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Meds-ADP Inhibitors Within Five Days *Format:* Integer

ParentShortName: MedADP5Days *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Meds-Antiplatelets Within 5 Days *SeqNo:* 1870
Short Name: **MedAplt5Days** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has received Antiplatelets within 5 days preceding surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Meds-Glycoprotein IIb/IIIa Inhibitor *SeqNo:* 1880
Short Name: **MedGP** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received Glycoprotein IIb/IIIa inhibitors within 24 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Meds-Glycoprotein IIb/IIIa Inhibitor-Medication Name *SeqNo:* 1890
Short Name: **MedGPMN** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the Glycoprotein IIb/IIIa Inhibitor the patient received within 24 hours preceding surgery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Meds-Glycoprotein IIb/IIIa Inhibitor *Format:* Text (categorical values specified by STS)

ParentShortName: MedGP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Abciximab (ReoPro)
- 2 Eptifibatide (Integrilin)
- 3 Tirofiban (Aggrastat)

Long Name: Meds-Thrombolytics *SeqNo:* 1900
Short Name: **MedThrom** *Core:* Yes
Section Name: Preoperative Medications *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received thrombolytics within 48 hours preoperatively.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cardiac Catheterization Performed *SeqNo:* 1910
Short Name: **CarCathPer** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether cardiac catheterization and/or CT angio was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cardiac Catheterization Date *SeqNo:* 1920
Short Name: **CarCathDt** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the date cardiac catheterization was performed.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Cardiac Catheterization Performed *Format:* Date mm/dd/yyyy
ParentShortName: CarCathPer *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Num Dis Vessels *SeqNo:* 1930
Short Name: **NumDisV** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the number of diseased major native coronary vessel systems: LAD system, Circumflex system, and/or Right system with >= 50% narrowing of any vessel preoperatively.

 NOTE: Left main disease (>=50%) is counted as TWO vessels (LAD and Circumflex, which may include a Ramus Intermedius). For example, left main and RCA would count as three total.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	None	No significant coronary obstructive disease.
2	One	
3	Two	
4	Three	

Long Name: Left Main Dis \geq 50% *SeqNo:* 1940
Short Name: **LMainDis** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has Left Main Coronary Disease. Left Main Coronary Disease is present when there is \geq 50% compromise of vessel diameter preoperatively.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No

ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Proximal LAD Disease \geq 70% *SeqNo:* 1941
Short Name: **ProxLAD** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the percent luminal narrowing of the proximal left anterior descending artery at the point of maximal stenosis is greater than or equal to 70%.

LowValue: *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Hemo Data-EF Done *SeqNo:* 1950
Short Name: **HDEFD** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the Ejection Fraction was measured prior to the induction of anesthesia.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Hemo Data-EF *SeqNo:* 1960
Short Name: **HDEF** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction. Use the most recent determination prior to the surgical intervention documented on a diagnostic report.

Enter a percentage in the range of 1 - 99. If a percentage range is reported, report a whole number using the "mean" (i.e., 50-55%, is reported as 53%).

Values reported as:

Normal = 60%

Good function = 50%

Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25%

Severely reduced = 20%

NOTE: If no diagnostic report is in the medical record, a value documented in the progress record is acceptable.

LowValue: 1.0 *UsualRangeLow:* 5.0 *ACCField:* Not mapped
HighValue: 99.0 *UsualRangeHigh:* 90.0 *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: Hemo Data-EF Done *Format:* Real
ParentShortName: HDEFD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Hemo Data-EF Method *SeqNo:* 1970
Short Name: **HDEFMeth** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate how the Ejection Fraction measurement information was obtained preoperatively.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Hemo Data-EF Done *Format:* Text (categorical values specified by STS)

ParentShortName: HDEFD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
2	LV Gram	Left Ventriculogram
3	Radionucleotide	MUGA Scan
4	Estimate	From other calculations, based upon available clinical data.
5	ECHO	Echocardiogram
6	MRI/CT	
9	Other	

Long Name: Hemo Data-LV Systolic Dimension *SeqNo:* 1980
Short Name: **LVSD** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate LV systolic dimension in mm as indicated on echo.

LowValue: 0.0 *UsualRangeLow:* 25.0 *ACCField:* Mapped - Definition and coding
HighValue: 90.0 *UsualRangeHigh:* 35.0 *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Hemo Data-LV End-Diastolic Dimension *SeqNo:* 1990
Short Name: **LVEDD** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the Left Ventricular End-Diastolic Dimension in mm as indicated on echo.
LowValue: 20.0 *UsualRangeLow:* 45.0 *ACCField:* Mapped - Definition and coding
HighValue: 100.0 *UsualRangeHigh:* 54.0 *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Hemo Data - HDPAD Mean Done *SeqNo:* 2000
Short Name: **HDPAD** *Core:* No
Section Name: Hemodynamics/Cath/Echo *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the mean pulmonary artery pressure in mm Hg, was recorded from catheterization data or Swan-Ganz catheter BEFORE the induction of anesthesia.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

<i>Long Name:</i>	Hemo Data-PA Mean	<i>SeqNo:</i>	2010
<i>Short Name:</i>	HDPAMean	<i>Core:</i>	No
<i>Section Name:</i>	Hemodynamics/Cath/Echo	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate the mean pulmonary artery pressure in mm Hg, recorded from catheterization data or Swan-Ganz catheter BEFORE the induction of anesthesia.		
<i>LowValue:</i>	1.0	<i>UsualRangeLow:</i>	<i>ACCField:</i> Not mapped
<i>HighValue:</i>	99.0	<i>UsualRangeHigh:</i>	<i>ReportField:</i> Yes <i>NQFField:</i> No
			<i>ModelField:</i> Yes <i>PQRIField:</i> No
<i>Parent Long Name:</i>	Hemo Data - HDPA Mean Done	<i>Format:</i>	Real
<i>ParentShortName:</i>	HDPAD	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User

<i>Long Name:</i>	Hemo-PA Systolic Pressure Measured	<i>SeqNo:</i>	2020
<i>Short Name:</i>	PASYSMeas	<i>Core:</i>	Yes
<i>Section Name:</i>	Hemodynamics/Cath/Echo	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether the PA systolic pressure was measured prior to incision.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	<i>NQFField:</i>
		<i>ModelField:</i>	<i>PQRIField:</i>
<i>Parent Long Name:</i>		<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>		<i>DataLength:</i>	
<i>ParentValue:</i>		<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	

Long Name: Hemo-PA Systolic Pressure *SeqNo:* 2030
Short Name: **PASYS** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Capture highest PA systolic pressure recorded prior to incision.
LowValue: 10.0 *UsualRangeLow:* 15.0 *ACCField:* Not mapped
HighValue: 150.0 *UsualRangeHigh:* 30.0 *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Hemo-PA Systolic Pressure Measured *Format:* Real
ParentShortName: PASYSMeas *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VD-Aortic *SeqNo:* 2040
Short Name: **VDAort** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether Aortic Valve disease is present.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
 - 2 No
-

Long Name: VD-Aortic Etiology *SeqNo:* 2090
Short Name: **VDAoEt** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate primary etiology of aortic valve disease.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Aortic *Format:* Text (categorical values specified by STS)
ParentShortName: VDAort *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Degenerative (senile)	Includes calcific, senile, and leaflet prolapse.
2	Endocarditis	
3	Congenital	
4	Rheumatic	
5	Primary Aortic Disease	
6	LV Outflow Tract Obstruction	
7	Supravalvular Aortic Stenosis	
8	Tumor	
9	Trauma	
10	Other	

Long Name: VD-Endocarditis Root Abscess *SeqNo:* 2110
Short Name: **VDEndAB** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if endocarditis is associated with an aortic root abscess.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Aortic Etiology *Format:* Text (categorical values specified by STS)

ParentShortName: VDAoEt *DataLength:*

ParentValue: = "Endocarditis" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VD-Congenital Type *SeqNo:* 2120
Short Name: **VDCongentT** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate type of congenital Aortic Valve disease.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Aortic Etiology *Format:* Text (categorical values specified by STS)

ParentShortName: VDAoEt *DataLength:*

ParentValue: = "Congenital" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Bicuspid
2	Other

Long Name: VD-Primary aortic disease *SeqNo:* 2130
Short Name: **VDPrimAo** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate type of Primary Aortic Disease.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Aortic Etiology *Format:* Text (categorical values specified by STS)
ParentShortName: VDAoEt *DataLength:*
ParentValue: = "Primary Aortic Disease" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Marfans	
2	Other Connective tissue disorder	
3	Atherosclerotic Aneurysm	
4	Inflammatory	Syphilis, Takayasu
5	Aortic Dissection	
6	Idiopathic Root Dilation	

Long Name: VD-LV Outflow Tract Obstruction Type *SeqNo:* 2140
Short Name: **VDLVOutOb** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate type of LV outflow tract obstruction.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Aortic Etiology *Format:* Text (categorical values specified by STS)
ParentShortName: VDAoEt *DataLength:*
ParentValue: = "LV outflow tract obstruction" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	HOCM	Hypertrophic Cardiomyopathy

- 2 Sub-aortic membrane
- 3 Sub-aortic Tunnel

Long Name: VD-Aortic Valve Tumor Type *SeqNo:* 2150
Short Name: **VDAortTumor** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the type of cardiac tumor.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Aortic Etiology *Format:* Text (categorical values specified by STS)
ParentShortName: VDAoEt *DataLength:*
ParentValue: = "Tumor" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Myxoma
2	Papillary fibroelastoma
3	Carcinoid
4	Other

Long Name: VD-Stenosis-Aortic *SeqNo:* 2152
Short Name: **VDStenA** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether Aortic Stenosis is present.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No
Parent Long Name: VD-Aortic *Format:* Text (categorical values specified by STS)
ParentShortName: VDAort *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes

2 No

Long Name: VD-AV Area *SeqNo:* 2153
Short Name: **VDAoVA** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the smallest aortic valve area (in cm squared) obtained from an echocardiogram or cath report.
LowValue: 0.2 *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding
HighValue: 5.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Stenosis-Aortic *Format:* Real
ParentShortName: VDStenA *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VD-Gradient-Aortic *SeqNo:* 2154
Short Name: **VDGradA** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the highest MEAN gradient (in mmHg) across the aortic valve obtained from an echocardiogram or angiogram preoperatively.
LowValue: 0 *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: 200 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VD-Stenosis-Aortic *Format:* Integer
ParentShortName: VDStenA *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VD-Insuff-Aortic *SeqNo:* 2155
Short Name: **VDInsufA** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Aortic valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VD-Aortic *Format:* Text (categorical values specified by STS)

ParentShortName: VDAort *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 0 | None |
| 1 | Trivial/Trace |
| 2 | Mild |
| 3 | Moderate |
| 4 | Severe |

Long Name: VD-Mitral *SeqNo:* 2160
Short Name: **VDMit** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Mitral valve disease is present.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |

2 No

Long Name: VD-Mitral Valve Disease Etiology *SeqNo:* 2170
Short Name: **VDMitET** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate primary etiology of mitral valve disease.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Mitral *Format:* Text (categorical values specified by STS)
ParentShortName: VDMit *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Annular or Degenerative Disease
 - 2 Endocarditis
 - 3 Rheumatic
 - 4 Ischemic
 - 5 Congenital
 - 6 Hypertrophic Obstructive Cardiomyopathy (HOCM)
 - 7 Tumor
 - 8 Trauma
 - 9 Non-ischemic cardiomyopathy
 - 10 Other
-

Long Name: VD-Mitral Valve Disease Degenerative Location *SeqNo:* 2180
Short Name: **VDMitDegLoc** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the location of the degenerative mitral disease.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Mitral Valve Disease Etiology *Format:* Text (categorical values specified by STS)

ParentShortName: VDMitET *DataLength:*

ParentValue: = "Annular or Degenerative Disease" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Posterior Leaflet
- 2 Anterior Leaflet
- 3 Bileaflet

Long Name: VD-Mitral Annular Disease Type *SeqNo:* 2190
Short Name: **VDMitAnDegDis** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of mitral valve annular disease.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Mitral Valve Disease Etiology *Format:* Text (categorical values specified by STS)

ParentShortName: VDMitET *DataLength:*

ParentValue: = "Annular or Degenerative Disease" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Pure Annular Dilatation
- 2 Mitral Annular Calcification

Long Name: VD-Mitral Valve Disease Ischemic Type *SeqNo:* 2210
Short Name: **VDMitIsTy** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate type of ischemic mitral disease.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Mitral Valve Disease
 Etiology *Format:* Text (categorical values
 specified by STS)

ParentShortName: VDMitET *DataLength:*

ParentValue: = "Ischemic" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Acute	Within 30 days of MI
2	Chronic	Greater than 30 days after MI

Long Name: VD-Mitral Papillary Muscle Rupture *SeqNo:* 2220
Short Name: **VDMitPMR** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether papillary muscle rupture occurred.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Mitral Valve Disease
 Ischemic Type *Format:* Text (categorical values
 specified by STS)

ParentShortName: VDMitIsTy *DataLength:*

ParentValue: = "Acute" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VD-Mitral Valve Tumor Type *SeqNo:* 2221
Short Name: **VDMitTumor** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the type of cardiac tumor.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Mitral Valve Disease *Format:* Text (categorical values
Etiology specified by STS)
ParentShortName: VDMitET *DataLength:*
ParentValue: = "Tumor" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Myxoma
2	Papillary fibroelastoma
3	Carcinoid
4	Other

Long Name: VD-Mitral Valve Disease Functional Class *SeqNo:* 2230
Short Name: **VDMitFC** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes
DBTableName AdultData
Definition: Indicate Functional Class of Mitral Disease.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VD-Mitral *Format:* Text (categorical values
specified by STS)
ParentShortName: VDMit *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Type I	Normal leaflet motion
2	Type II	Excess Leaflet Motion
3	Type IIIa	Restricted leaflet motion systolic and diastolic
4	Type IIIb	Restricted leaflet motion systolic

Long Name: VD-Stenosis-Mitral *SeqNo:* 2240
Short Name: **VDStenM** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Mitral Stenosis is present.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VD-Mitral *Format:* Text (categorical values specified by STS)

ParentShortName: VDMit *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VD-Mitral Valve Area *SeqNo:* 2250
Short Name: **VDMVA** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the smallest Mitral Valve Area reported on cath or echo, in centimeters squared.

LowValue: 0.6 *UsualRangeLow:* *ACCFIELD:* Mapped - Definition and coding
HighValue: 6.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Stenosis-Mitral *Format:* Real

ParentShortName: VDStenM *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: VD-Mitral Valve Gradient *SeqNo:* 2260
Short Name: **VDGradM** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest mean gradient (in mm Hg) across the mitral valve obtained from an echocardiogram or angiogram preoperatively.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 30 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Stenosis-Mitral *Format:* Integer

ParentShortName: VDStenM *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: VD-Insuff-Mitral *SeqNo:* 2270
Short Name: **VDInsufM** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Mitral valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: VD-Mitral *Format:* Text (categorical values specified by STS)

ParentShortName: VDMit *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 0 None
- 1 Trivial/Trace
- 2 Mild
- 3 Moderate
- 4 Severe

Long Name: VD-Tricuspid *SeqNo:* 2280
Short Name: **VDTr** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Tricuspid Valve disease is present.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VD-Tricuspid Etiology *SeqNo:* 2290
Short Name: **VDTrEt** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate primary etiology of tricuspid valve disease.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VD-Tricuspid *Format:* Text (categorical values specified by STS)

ParentShortName: VDTr *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Functional	annular dilatation with or without leaflet tethering
2	Endocarditis	
3	Congenital	
4	Tumor	
5	Trauma	
6	Other	

Long Name: VD-Stenosis-Tricuspid *SeqNo:* 2300
Short Name: **VDStenT** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Tricuspid Stenosis is present.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VD-Tricuspid *Format:* Text (categorical values specified by STS)

ParentShortName: VDTr *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VD-Insuff-Tricuspid *SeqNo:* 2320
Short Name: **VDInsuffT** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Tricuspid valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: VD-Tricuspid *Format:* Text (categorical values specified by STS)

ParentShortName: VDTr *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
0	None
1	Trivial/Trace
2	Mild

3 Moderate

4 Severe

Long Name: VD-Pulmonic *SeqNo:* 2321
Short Name: **VDPulm** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData*Definition:* Indicate whether Pulmonic Valve disease is present.*LowValue:* *UsualRangeLow:* *ACCField:* Not mapped*HighValue:* *UsualRangeHigh:* *ReportField:* *NQFField:**ModelField:* *PQRIField:**Parent Long Name:* *Format:* Text (categorical values specified by STS)*ParentShortName:* *DataLength:**ParentValue:* *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VD-Stenosis-Pulmonic *SeqNo:* 2330
Short Name: **VDSStenP** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData*Definition:* Indicate whether Pulmonic Stenosis is present.*LowValue:* *UsualRangeLow:* *ACCField:* Not mapped*HighValue:* *UsualRangeHigh:* *ReportField:* No *NQFField:* No*ModelField:* No *PQRIField:* No*Parent Long Name:* VD-Pulmonic *Format:* Text (categorical values specified by STS)*ParentShortName:* VDPulm *DataLength:**ParentValue:* = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VD-Insuff-Pulmonic *SeqNo:* 2340
Short Name: **VDInsufP** *Core:* Yes
Section Name: Hemodynamics/Cath/Echo *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether there is evidence of Pulmonic valve regurgitation. Enter level of valve function associated with highest risk (i.e., worst performance).

Enter the highest level recorded in the chart. "Moderately severe" should be coded as "Severe".

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: VD-Pulmonic *Format:* Text (categorical values specified by STS)

ParentShortName: VDPulm *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 0 | None |
| 1 | Trivial/Trace |
| 2 | Mild |
| 3 | Moderate |
| 4 | Severe |

Long Name: Surgeon *SeqNo:* 2350
Short Name: **Surgeon** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the surgeon responsible for the patient's care.

This field must have controlled data entry where a user selects the surgeon name from a user list. This will remove variation in spelling, abbreviations and punctuation within the field.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by User)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Surgeon's National Provider Identifier *SeqNo:* 2360
Short Name: **SurgNPI** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the individual-level National Provider Identifier of the surgeon performing the procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Surgeon *Format:* Text (categorical values specified by User)

ParentShortName: Surgeon *DataLength:*

ParentValue: Is Not Missing *Data Source:* Lookup

Long Name: Taxpayer Identification Number *SeqNo:* 2370
Short Name: **TIN** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the group-level Taxpayer Identification Number for the Taxpayer holder of record for the Surgeon's National Provider Identifier that performed the procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text (categorical values specified by User)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Lookup

<i>Long Name:</i>	Incidence	<i>SeqNo:</i>	2380
<i>Short Name:</i>	Incidenc	<i>Core:</i>	Yes
<i>Section Name:</i>	Operative	<i>Harvest:</i>	Yes

DBTableName AdultData

Definition: Indicate if this is the patient's:
 -first cardiovascular surgery
 -first re-op cardiovascular surgery
 -second re-op cardiovascular surgery
 -third re-op cardiovascular surgery
 -fourth or more re-op cardiovascular surgery.

<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	Yes
		<i>PQRIField:</i>	No

<i>Parent Long Name:</i>	<i>Format:</i>	Text (categorical values specified by STS)
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<i>ParentShortName:</i>	<i>DataLength:</i>
<i>ParentValue:</i>	<i>Data Source:</i> User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	First cardiovascular surgery
2	First re-op cardiovascular surgery
3	Second re-op cardiovascular surgery
4	Third re-op cardiovascular surgery
5	Fourth or more re-op cardiovascular surgery

Long Name: Status *SeqNo:* 2390
Short Name: **Status** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the clinical status of the patient prior to entering the operating room.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Elective	The patient's cardiac function has been stable in the days or weeks prior to the operation. The procedure could be deferred without increased risk of compromised cardiac outcome.
2	Urgent	Procedure required during same hospitalization in order to minimize chance of further clinical deterioration. Examples include but are not limited to: Worsening, sudden chest pain, CHF, acute myocardial infarction (AMI), anatomy, IABP, unstable angina (USA) with intravenous (IV) nitroglycerin (NTG) or rest angina.
3	Emergent	Patients requiring emergency operations will have ongoing, refractory (difficult, complicated, and/or unmanageable) unrelenting cardiac compromise, with or without hemodynamic instability, and not responsive to any form of therapy except cardiac surgery. An emergency operation is one in which there should be no delay in providing operative intervention.
4	Emergent Salvage	The patient is undergoing CPR en route to the OR or prior to anesthesia induction or has ongoing ECMO to maintain life.

Long Name: Urgent Reason *SeqNo:* 2400
Short Name: **UrgntRsn** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the PRIMARY reason why the patient had an urgent status.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Status *Format:* Text (categorical values specified by STS)

ParentShortName: Status *DataLength:*

ParentValue: = "Urgent" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	AMI
2	IABP
3	Worsening CP
4	CHF
5	Anatomy
6	USA (unstable angina)
7	Rest Angina
8	Valve Dysfunction
9	Aortic Dissection
10	Angiographic Accident
11	Cardiac Trauma
12	Infected Device
13	Syncope
14	PCI/CABG Hybrid
15	PCI Failure without clinical deterioration

Long Name: Emergent Reason *SeqNo:* 2410
Short Name: **EmergRsn** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData

Definition: Indicate the PRIMARY reason why the patient had Emergent Status.

Patients requiring emergency operations will have ongoing, refractory (difficult, complicated, and/or unmanageable) unrelenting cardiac compromise, with or without hemodynamic instability, and not responsive to any form of therapy except cardiac surgery. An emergency operation is one in which there should be no delay in providing operative intervention.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Status *Format:* Text (categorical values specified by STS)

ParentShortName: Status *DataLength:*
ParentValue: = "Emergent" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Shock Circ Support	
2	Shock No Circ Support	
3	Pulmonary Edema	
4	Acute Evolving Myocardial Infarction (AEMI)	Acute Evolving Myocardial Infarction within 24 hours before surgery
5	Ongoing Ischemia	
6	Valve Dysfunction	
7	Aortic Dissection	
8	Angiographic Accident	
9	Cardiac Trauma	
10	Infected Device	
11	Syncope	
12	PCI/CABG Hybrid	
13	Anatomy	

Long Name: Previously Attempted Case Canceled *SeqNo:* 2415
Short Name: **PCancCase** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether this case was previously attempted during this admission and canceled or aborted after patient entered the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Previously Attempted Canceled Case Date *SeqNo:* 2416
Short Name: **PCancCaseDt** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Enter date previously attempted case was canceled.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Previously Attempted Case Canceled *Format:* Date mm/dd/yyyy

ParentShortName: PCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Previously Attempted Canceled Case Timing *SeqNo:* 2417
Short Name: **PCancCaseTmg** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate at what point previously attempted case was canceled or aborted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Previously Attempted Case Canceled *Format:* Text (categorical values specified by STS)
ParentShortName: PCancCase *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|------------------------------------|
| 1 | Prior to Induction of Anesthesia |
| 2 | After Induction, Prior to Incision |
| 3 | After Incision Made |

Long Name: Previously Attempted Canceled Case Reason *SeqNo:* 2418
Short Name: **PCancCaseRsn** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the reason why the previously attempted case was canceled or aborted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Previously Attempted Case Canceled *Format:* Text (categorical values specified by STS)
ParentShortName: PCancCase *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

- | <u>Code:</u> | <u>Value:</u> | <u>Definition:</u> |
|--------------|------------------------|--|
| 1 | Anesthesiology event | Includes airway, line insertion and medication issues encountered during induction |
| 2 | Cardiac arrest | Patient deterioration unrelated to induction |
| 3 | Equipment/supply issue | Device malfunction or supply issue including devices |

and blood products

- 4 Unanticipated tumor
- 5 Other

Long Name: Previously Attempted Canceled Case Procedure - CABG *SeqNo:* 2419
Short Name: **PCancCaseCAB** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included coronary artery bypass grafting.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Previously Attempted Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: PCancCase *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Previously Attempted Canceled Case Procedure - Valve *SeqNo:* 2420
Short Name: **PCancCaseVal** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included a valve repair or replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Previously Attempted Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: PCancCase *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |

2 No

Long Name: Previously Attempted Canceled Case Procedure - Mechanical Assist Device *SeqNo:* 2421

Short Name: **PCancCaseMech** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included implanting or explanting a mechanical assist device.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Previously Attempted Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: PCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previously Attempted Canceled Case Procedure - Other Cardiac *SeqNo:* 2422

Short Name: **PCancCaseOC** *Core:* Yes

Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included any other cardiac procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Previously Attempted Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: PCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previously Attempted Canceled Case Procedure - Other Non-Cardiac *SeqNo:* 2423
Short Name: **PCancCaseONC** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the previously attempted procedure included any other non-cardiac procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Previously Attempted Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: PCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Current Case Canceled *SeqNo:* 2424
Short Name: **CCancCase** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the current case was canceled or aborted after patient entered the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Current Case Canceled Timing *SeqNo:* 2425
Short Name: **CCancCaseTmg** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate at what point the current case was canceled or aborted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Current Case Canceled *Format:* Text (categorical values specified by STS)
ParentShortName: CCancCase *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|------------------------------------|
| 1 | Prior to Induction of Anesthesia |
| 2 | After Induction, Prior to Incision |
| 3 | After Incision Made |

Long Name: Current Case Canceled Reason *SeqNo:* 2426
Short Name: **CCancCaseRsn** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the reason why the current case was canceled or aborted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Current Case Canceled *Format:* Text (categorical values specified by STS)
ParentShortName: CCancCase *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

- | <u>Code:</u> | <u>Value:</u> | <u>Definition:</u> |
|--------------|------------------------|--|
| 1 | Anesthesiology event | Includes airway, line insertion and medication issues encountered during induction |
| 2 | Cardiac arrest | Patient deterioration unrelated to induction |
| 3 | Equipment/supply issue | Device malfunction or supply issue including devices |

and blood products

- 4 Unanticipated tumor
- 5 Other

Long Name: Current Case Canceled Procedure - CABG *SeqNo:* 2427
Short Name: **CCancCaseCAB** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included coronary artery bypass grafting.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Current Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: CCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Current Case Canceled Procedure - Valve *SeqNo:* 2428
Short Name: **CCancCaseVal** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included a valve repair or replacement.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Current Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: CCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Current Case Canceled Procedure - Mechanical Assist Device *SeqNo:* 2429
Short Name: **CCancCaseMech** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included implanting or explanting a mechanical assist device.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Current Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: CCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Current Case Canceled Procedure - Other Cardiac *SeqNo:* 2430
Short Name: **CCancCaseOC** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included any other cardiac procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Current Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: CCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Current Case Canceled Procedure - Other Non-cardiac *SeqNo:* 2431
Short Name: **CCancCaseONC** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the plan for the current procedure included any other non-cardiac procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Current Case Canceled *Format:* Text (categorical values specified by STS)

ParentShortName: CCancCase *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Operative Approach *SeqNo:* 2435
Short Name: **OPApp** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the operative approach.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Full conventional sternotomy
2	Partial sternotomy
3	RIGHT OR LEFT parasternal incision
4	Left Thoracotomy
5	Right Thoracotomy

- 6 Transverse sternotomy
(includes clamshell)
- 7 Minimally invasive

Long Name: Robotic Technology Assisted *SeqNo:* 2436
Short Name: **Robotic** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the cardiac surgery was assisted by robotic technology.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB *SeqNo:* 2437
Short Name: **OpCAB** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether coronary artery bypass grafting was done.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Valve *SeqNo:* 2440
Short Name: **OpValve** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done on the Aortic, Mitral, Tricuspid or Pulmonic valves.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Valve Prosthesis Explant *SeqNo:* 2450
Short Name: **ValExp** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a prosthetic valve or annuloplasty was explanted during this procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Valve Prosthesis Explant Postion *SeqNo:* 2451
Short Name: **ValExpPos** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the location of the first explanted prosthetic valve or annuloplasty.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)

ParentShortName: ValExp *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Aortic
- 2 Mitral
- 3 Tricuspid
- 4 Pulmonic

Long Name: Valve Explant Type *SeqNo:* 2460
Short Name: **ValExpTyp** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the first type of valve device explanted or enter unknown.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)

ParentShortName: ValExp *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Unknown
- 2 Mechanical Valve
- 3 Bioprosthetic Valve
- 4 Annuloplasty Device

-
- 5 Mitral Clip
 - 6 Transcatheter Device
-

Long Name: Valve Explant Manufacturer *SeqNo:* 2461
Short Name: **ValExpMan** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the name of the manufacturer of the first prosthesis explanted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)
ParentShortName: ValExp *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 None (Homograft or Pulmonary Autograft)
- 2 ATS
- 3 Baxter
- 4 Biocore
- 5 Björk-Shiley
- 6 CarboMedics
- 7 Carpentier-Edwards
- 8 Cosgrove-Edwards
- 9 Cryolife
- 10 Cryolife O'Brien
- 11 Edwards
- 12 Genesee
- 13 Hancock
- 14 Ionescu-Shiley
- 15 Labcor
- 16 LifeNet
- 17 Lillehei-Kaster
- 18 MCRI
- 19 Medtronic
- 20 Medtronic Colvin Galloway

- 21 Medtronic-Duran
- 22 Medtronic-Hall
- 23 Mitroflow
- 24 OmniCarbon
- 25 OmniScience
- 26 Sorin
- 27 Sorin-Puig
- 28 St. Jude Medical
- 29 St. Jude Tailor
- 30 Starr-Edwards
- 31 Ultracor
- 98 Unknown
- 99 Other

Long Name: Valve Explant Device *SeqNo:* 2462
Short Name: **ValExpDev** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the first prosthesis explanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)

ParentShortName: ValExp *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---|
| 2 | ATS Mechanical Prosthesis |
| 3 | Björk-Shiley Convex-Concave Mechanical Prosthesis |
| 4 | Björk-Shiley Monostrut Mechanical Prosthesis |
| 6 | CarboMedics Mechanical Prosthesis |
| 57 | CarboMedics Carbo-Seal Ascending Aortic Valved Conduit Prosthesis |

- 58 CarboMedics Carbo-Seal
Valsalva Ascending Aortic
Valved Conduit Prosthesis
- 59 CarboMedics Reduced Cuff
Aortic Valve
- 60 CarboMedics Standard Aortic
Valve
- 61 CarboMedics Top-Hat Supra-
annular Aortic Valve
- 62 CarboMedics OptiForm
Mitral Valve
- 63 CarboMedics Standard Mitral
Valve
- 64 CarboMedics Orbis Universal
Valve
- 65 CarboMedics Small Adult
Aortic and Mitral Valves
- 53 Lillehei-Kaster Mechanical
Prosthesis
- 10 MCRI On-X Mechanical
Prosthesis
- 8 Medtronic-Hall/Hall Easy-Fit
Mechanical Prosthesis
- 66 Medtronic ADVANTAGE
Mechanical Prosthesis
- 9 OmniCarbon Mechanical
Prosthesis
- 54 OmniScience Mechanical
Prosthesis
- 11 Sorin Bicarbon (Baxter Mira)
Mechanical Prosthesis
- 12 Sorin Monoleaflet Allcarbon
Mechanical Prosthesis
- 13 St. Jude Medical Mechanical
Heart Valve
- 67 St. Jude Medical Masters
Series Mechanical Heart
Valve
- 68 St. Jude Medical Masters
Series Aortic Valve Graft
Prosthesis
- 69 St. Jude Medical Mechanical
Heart Valve Hemodynamic
Plus (HP) Series
- 70 St. Jude Medical Masters

- Series Hemodynamic Plus
Valve with FlexCuff Sewing
Ring
- 71 St. Jude Medical Regent Valve
- 14 Starr-Edwards Caged-Ball
Prosthesis
- 15 Ultracor Mechanical
Prosthesis
- 133 Medtronic Hall Conduit
- 108 ATS 3f Aortic Bioprosthesis
- 72 Edwards Prima Stentless
Porcine Bioprosthesis -
Subcoronary
- 73 Edwards Prima Stentless
Porcine Bioprosthesis - Root
- 19 Biocor Porcine Bioprosthesis
- 74 Biocor Stentless Porcine
Bioprosthesis - Subcoronary
- 75 Biocor Stentless Porcine
Bioprosthesis - Root
- 21 CarboMedics PhotoFix
Pericardial Bioprosthesis
- 76 Carpentier-Edwards Porcine
Bioprosthesis
- 77 Edwards Prima Plus Stentless
Porcine Bioprosthesis -
Subcoronary
- 78 Edwards Prima Plus Stentless
Porcine Bioprosthesis - Root
- 22 Carpentier-Edwards
PERIMOUNT Pericardial
Bioprosthesis
- 103 Carpentier-Edwards
PERIMOUNT Pericardial
Magna Bioprosthesis
- 23 Carpentier-Edwards Standard
Porcine Bioprosthesis
- 25 Carpentier-Edwards Supra-
Annular Aortic Porcine
Bioprosthesis
- 79 Cryolife O'Brien Stentless
Porcine Bioprosthesis -
Subcoronary
- 80 Cryolife O'Brien Stentless
Porcine Bioprosthesis - Root

- 55 Hancock Standard Porcine Bioprosthesis
- 28 Hancock II Porcine Bioprosthesis
- 29 Hancock Modified Orifice Porcine Bioprosthesis
- 30 Ionescu-Shiley Pericardial Bioprosthesis
- 31 Labcor Stented Porcine Bioprosthesis
- 81 Labcor Stentless Porcine Bioprosthesis - Subcoronary
- 82 Labcor Stentless Porcine Bioprosthesis - Root
- 83 Medtronic Freestyle Stentless Porcine Bioprosthesis - Subcoronary
- 84 Medtronic Freestyle Stentless Porcine Bioprosthesis - Root
- 35 Medtronic Intact Porcine Bioprosthesis
- 36 Medtronic Mosaic Porcine Bioprosthesis
- 85 Medtronic Contegra Bovine Jugular Bioprosthesis
- 37 Mitroflow Pericardial Bioprosthesis
- 39 St. Jude Medical Toronto SPV Stentless Porcine Bioprosthesis
- 40 St. Jude Medical-Bioimplant Porcine Bioprosthesis
- 86 St. Jude Medical Biocor Stented Tissue Valve
- 87 St. Jude Medical Epic Stented Porcine Bioprosthesis
- 88 St. Jude Medical Toronto Root Stentless Porcine Bioprosthesis
- 38 Sorin Pericarbon Stentless Pericardial Bioprosthesis
- 111 Carpentier-Edwards PERIMOUNT MAGNA Pericardial Bioprosthesis with Carpentier-Edwards Thermafix Tissue Process

- 112 Carpentier-Edwards
PERIMOUNT Theon RSR
Pericardial Bioprosthesis
- 113 Carpentier-Edwards
PERIMOUNT RSR
Pericardial Bioprosthesis
- 114 Carpentier-Edwards
PERIMOUNT Theon
Pericardial Bioprosthesis
- 115 Carpentier-Edwards S.A.V.
Porcine Bioprosthesis
- 116 Edwards Prima Plus Stentless
Bioprosthesis
- 117 Carpentier-Edwards
PERIMOUNT Plus
Pericardial Bioprosthesis with
Tricentrix Holder
- 118 Carpentier-Edwards Duraflex
Low Pressure Porcine
Bioprosthesis
- 119 Carpentier-Edwards Duraflex
Low Pressure ESR Porcine
Bioprosthesis
- 120 Carpentier-Edwards
PERIMOUNT Theon
Pericardial Bioprosthesis with
Tricentrix Holder.
- 121 St. Jude Medical Biacor
Supra Stented Porcine
Bioprosthesis
- 122 St. Jude Medical Epic Supra
Stented Porcine Bioprosthesis.
- 134 Carpentier Edwards Physio II
- 135 Carpentier Edwards
Perimount Magna Mitral
Valve
- 89 CryoLife Aortic Homograft
- 90 CryoLife Pulmonary
Homograft
- 91 CryoLife CryoValve
SG(Decellularized)Aortic
Homograft
- 92 CryoLife CryoValve SG
Pulmonary Homograft
- 41 Homograft Aortic -
Subcoronary

- 42 Homograft Aortic - Root
- 43 Homograft Mitral
- 44 Homograft Pulmonic Root
- 93 LifeNet CV Allografts
- 45 Pulmonary Autograft to aortic root (Ross Procedure)
- 109 ATS Simulus Flex-O Ring
- 110 ATS Simulus Flex-C Band
- 94 CarboMedics AnnuloFlo Ring
- 95 CarboMedics AnnuloFlex Ring
- 96 CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
- 46 Carpentier-Edwards Classic Annuloplasty Ring
- 104 Carpentier-Edwards Geoform Ring
- 105 Carpentier-Edwards IMR Etlogix Ring
- 47 Carpentier-Edwards Physio Annuloplasty System Ring
- 48 Cosgrove-Edwards Annuloplasty System Ring
- 97 Edwards MC³ Tricuspid Annuloplasty System
- 98 Genesee Sculptor Annuloplasty Ring
- 49 Medtronic Sculptor Ring
- 50 Medtronic-Duran AnCore Ring
- 51 Sorin-Puig-Messana Ring
- 52 St. Jude Medical Séguin Annuloplasty Ring.
- 106 St. Jude Medical Rigid Saddle Ring
- 99 St. Jude Medical Tailor Annuloplasty Ring
- 123 ATS Simulus Flexible Annuloplasty ring.
- 124 ATS Simulus Semi-Rigid Annuloplasty ring
- 125 Carpentier-Edwards Classic

- Annuloplasty Ring with Duraflo Treatment
- 126 Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment
- 127 Cosgrove-Edwards Annuloplasty System with Duraflo Treatment
- 128 Myxo Etlogix Annuloplasty Ring
- 131 Sorin Memo 3D Ring
- 132 UNIRING, Universal Annuloplasty System
- 137 Medtronic Colvin Galloway Future Ring
- 138 Medtronic Profile 3D Ring
- 100 Medtronic Colvin Galloway Future Band
- 101 Medtronic Duran Band
- 102 Medtronic Duran - Ancore Band
- 107 St. Jude Medical Tailor Annuloplasty Band
- 777 Other

Long Name: Second Valve Prosthesis Explant *SeqNo:* 2463
Short Name: **ValExp2** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a second prosthetic valve or annuloplasty was explanted during this procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Second Valve Prosthesis Explant Postion *SeqNo:* 2464
Short Name: **ValExpPos2** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the location of the second explanted prosthetic valve or annuloplasty.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Second Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)

ParentShortName: ValExp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Aortic
- 2 Mitral
- 3 Tricuspid
- 4 Pulmonic

Long Name: Second Valve Explant Type *SeqNo:* 2465
Short Name: **ValExpTyp2** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the second type of valve device explanted or enter unknown.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Second Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)

ParentShortName: ValExp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Unknown
- 2 Mechanical Valve
- 3 Bioprosthetic Valve

- 4 Annuloplasty Device
- 5 Mitral Clip
- 6 Transcatheter Device

Long Name: Second Valve Explant Manufacturer *SeqNo:* 2466
Short Name: **ValExpMan2** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the manufacturer of the second prosthesis explanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Second Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)

ParentShortName: ValExp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---|
| 1 | None (Homograft or Pulmonary Autograft) |
| 2 | ATS |
| 3 | Baxter |
| 4 | Biocore |
| 5 | Björk-Shiley |
| 6 | CarboMedics |
| 7 | Carpentier-Edwards |
| 8 | Cosgrove-Edwards |
| 9 | Cryolife |
| 10 | Cryolife O'Brien |
| 11 | Edwards |
| 12 | Genesee |
| 13 | Hancock |
| 14 | Ionescu-Shiley |
| 15 | Labcor |
| 16 | LifeNet |
| 17 | Lillehei-Kaster |
| 18 | MCRI |
| 19 | Medtronic |

- 20 Medtronic Colvin Galloway
- 21 Medtronic-Duran
- 22 Medtronic-Hall
- 23 Mitroflow
- 24 OmniCarbon
- 25 OmniScience
- 26 Sorin
- 27 Sorin-Puig
- 28 St. Jude Medical
- 29 St. Jude Tailor
- 30 Starr-Edwards
- 31 Ultracor
- 98 Unknown
- 99 Other

Long Name: Second Valve Explant Device *SeqNo:* 2467
Short Name: **ValExpDev2** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the name of the first prosthesis explanted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Second Valve Prosthesis Explant *Format:* Text (categorical values specified by STS)
ParentShortName: ValExp2 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---|
| 2 | ATS Mechanical Prosthesis |
| 3 | Björk-Shiley Convex-Concave Mechanical Prosthesis |
| 4 | Björk-Shiley Monostrut Mechanical Prosthesis |
| 6 | CarboMedics Mechanical Prosthesis |
| 57 | CarboMedics Carbo-Seal Ascending Aortic Valved |

- Conduit Prosthesis
- 58 CarboMedics Carbo-Seal
Valsalva Ascending Aortic
Valved Conduit Prosthesis
 - 59 CarboMedics Reduced Cuff
Aortic Valve
 - 60 CarboMedics Standard Aortic
Valve
 - 61 CarboMedics Top-Hat Supra-
annular Aortic Valve
 - 62 CarboMedics OptiForm
Mitral Valve
 - 63 CarboMedics Standard Mitral
Valve
 - 64 CarboMedics Orbis Universal
Valve
 - 65 CarboMedics Small Adult
Aortic and Mitral Valves
 - 53 Lillehei-Kaster Mechanical
Prosthesis
 - 10 MCRI On-X Mechanical
Prosthesis
 - 8 Medtronic-Hall/Hall Easy-Fit
Mechanical Prosthesis
 - 66 Medtronic ADVANTAGE
Mechanical Prosthesis
 - 9 OmniCarbon Mechanical
Prosthesis
 - 54 OmniScience Mechanical
Prosthesis
 - 11 Sorin Bicarbon (Baxter Mira)
Mechanical Prosthesis
 - 12 Sorin Monoleaflet Allcarbon
Mechanical Prosthesis
 - 13 St. Jude Medical Mechanical
Heart Valve
 - 67 St. Jude Medical Masters
Series Mechanical Heart
Valve
 - 68 St. Jude Medical Masters
Series Aortic Valve Graft
Prosthesis
 - 69 St. Jude Medical Mechanical
Heart Valve Hemodynamic
Plus (HP) Series

- 70 St. Jude Medical Masters Series Hemodynamic Plus Valve with FlexCuff Sewing Ring
- 71 St. Jude Medical Regent Valve
- 14 Starr-Edwards Caged-Ball Prosthesis
- 15 Ultracor Mechanical Prosthesis
- 133 Medtronic Hall Conduit
- 108 ATS 3f Aortic Bioprosthesis
- 72 Edwards Prima Stentless Porcine Bioprosthesis - Subcoronary
- 73 Edwards Prima Stentless Porcine Bioprosthesis - Root
- 19 Biocor Porcine Bioprosthesis
- 74 Biocor Stentless Porcine Bioprosthesis - Subcoronary
- 75 Biocor Stentless Porcine Bioprosthesis - Root
- 21 CarboMedics PhotoFix Pericardial Bioprosthesis
- 76 Carpentier-Edwards Porcine Bioprosthesis
- 77 Edwards Prima Plus Stentless Porcine Bioprosthesis - Subcoronary
- 78 Edwards Prima Plus Stentless Porcine Bioprosthesis - Root
- 22 Carpentier-Edwards PERIMOUNT Pericardial Bioprosthesis
- 103 Carpentier-Edwards PERIMOUNT Pericardial Magna Bioprosthesis
- 23 Carpentier-Edwards Standard Porcine Bioprosthesis
- 25 Carpentier-Edwards Supra-Annular Aortic Porcine Bioprosthesis
- 79 Cryolife O'Brien Stentless Porcine Bioprosthesis - Subcoronary
- 80 Cryolife O'Brien Stentless

- Porcine Bioprosthesis - Root
- 55 Hancock Standard Porcine Bioprosthesis
 - 28 Hancock II Porcine Bioprosthesis
 - 29 Hancock Modified Orifice Porcine Bioprosthesis
 - 30 Ionescu-Shiley Pericardial Bioprosthesis
 - 31 Labcor Stented Porcine Bioprosthesis
 - 81 Labcor Stentless Porcine Bioprosthesis - Subcoronary
 - 82 Labcor Stentless Porcine Bioprosthesis - Root
 - 83 Medtronic Freestyle Stentless Porcine Bioprosthesis - Subcoronary
 - 84 Medtronic Freestyle Stentless Porcine Bioprosthesis - Root
 - 35 Medtronic Intact Porcine Bioprosthesis
 - 36 Medtronic Mosaic Porcine Bioprosthesis
 - 85 Medtronic Contegra Bovine Jugular Bioprosthesis
 - 37 Mitroflow Pericardial Bioprosthesis
 - 39 St. Jude Medical Toronto SPV Stentless Porcine Bioprosthesis
 - 40 St. Jude Medical-Bioimplant Porcine Bioprosthesis
 - 86 St. Jude Medical Biocor Stented Tissue Valve
 - 87 St. Jude Medical Epic Stented Porcine Bioprosthesis
 - 88 St. Jude Medical Toronto Root Stentless Porcine Bioprosthesis
 - 38 Sorin Pericarbon Stentless Pericardial Bioprosthesis
 - 111 Carpentier-Edwards PERIMOUNT MAGNA Pericardial Bioprosthesis with

- Carpentier-Edwards
Thermafix Tissue Process
- 112 Carpentier-Edwards
PERIMOUNT Theon RSR
Pericardial Bioprosthesis
- 113 Carpentier-Edwards
PERIMOUNT RSR
Pericardial Bioprosthesis
- 114 Carpentier-Edwards
PERIMOUNT Theon
Pericardial Bioprosthesis
- 115 Carpentier-Edwards S.A.V.
Porcine Bioprosthesis
- 116 Edwards Prima Plus Stentless
Bioprosthesis
- 117 Carpentier-Edwards
PERIMOUNT Plus
Pericardial Bioprosthesis with
Tricentrix Holder
- 118 Carpentier-Edwards Duraflex
Low Pressure Porcine
Bioprosthesis
- 119 Carpentier-Edwards Duraflex
Low Pressure ESR Porcine
Bioprosthesis
- 120 Carpentier-Edwards
PERIMOUNT Theon
Pericardial Bioprosthesis with
Tricentrix Holder.
- 121 St. Jude Medical Biocor
Supra Stented Porcine
Bioprosthesis
- 122 St. Jude Medical Epic Supra
Stented Porcine Bioprosthesis.
- 134 Carpentier Edwards Physio II
- 135 Carpentier Edwards
Perimount Magna Mitral
Valve
- 89 CryoLife Aortic Homograft
- 90 CryoLife Pulmonary
Homograft
- 91 CryoLife CryoValve
SG(Decellularized)Aortic
Homograft
- 92 CryoLife CryoValve SG
Pulmonary Homograft

- 41 Homograft Aortic - Subcoronary
- 42 Homograft Aortic - Root
- 43 Homograft Mitral
- 44 Homograft Pulmonic Root
- 93 LifeNet CV Allografts
- 45 Pulmonary Autograft to aortic root (Ross Procedure)
- 109 ATS Simulus Flex-O Ring
- 110 ATS Simulus Flex-C Band
- 94 CarboMedics AnnuloFlo Ring
- 95 CarboMedics AnnuloFlex Ring
- 96 CarboMedics CardioFix Bovine Pericardium with PhotoFix Technology
- 46 Carpentier-Edwards Classic Annuloplasty Ring
- 104 Carpentier-Edwards Geoform Ring
- 105 Carpentier-Edwards IMR Etlogix Ring
- 47 Carpentier-Edwards Physio Annuloplasty System Ring
- 48 Cosgrove-Edwards Annuloplasty System Ring
- 97 Edwards MC³ Tricuspid Annuloplasty System
- 98 Genesee Sculptor Annuloplasty Ring
- 49 Medtronic Sculptor Ring
- 50 Medtronic-Duran AnCore Ring
- 51 Sorin-Puig-Messana Ring
- 52 St. Jude Medical Séguin Annuloplasty Ring.
- 106 St. Jude Medical Rigid Saddle Ring
- 99 St. Jude Medical Tailor Annuloplasty Ring
- 123 ATS Simulus Flexible Annuloplasty ring.
- 124 ATS Simulus Semi-Rigid

- Annuloplasty ring
- 125 Carpentier-Edwards Classic Annuloplasty Ring with Duraflo Treatment
- 126 Carpentier-Edwards Physio Annuloplasty Ring with Duraflo Treatment
- 127 Cosgrove-Edwards Annuloplasty System with Duraflo Treatment
- 128 Myxo Etlogix Annuloplasty Ring
- 131 Sorin Memo 3D Ring
- 132 UNIRING, Universal Annuloplasty System
- 137 Medtronic Colvin Galloway Future Ring
- 138 Medtronic Profile 3D Ring
- 100 Medtronic Colvin Galloway Future Band
- 101 Medtronic Duran Band
- 102 Medtronic Duran - Ancore Band
- 107 St. Jude Medical Tailor Annuloplasty Band
- 777 Other

<i>Long Name:</i>	VAD	<i>SeqNo:</i>	2470
<i>Short Name:</i>	VAD	<i>Core:</i>	No
<i>Section Name:</i>	Operative	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether a ventricular assist device (VAD) was implanted.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>		<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>		<i>DataLength:</i>	
<i>ParentValue:</i>		<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	

1	Yes
2	No

Long Name: VAD Implanted or Removed *SeqNo:* 2480
Short Name: **VADProc** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a VAD was implanted or removed during this procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Yes, implanted
3	Yes, explanted
4	Yes, implanted and explanted

Long Name: Other Card *SeqNo:* 2490
Short Name: **OpOCard** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether an other cardiac procedure was done (other than CABG and/or Valve procedures).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes

2 No

Long Name: Other Non Card *SeqNo:* 2500
Short Name: **OpONCard** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether a non-cardiac procedure was done.

LowValue: *UsualRangeLow:* *ACCFfield:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Unplanned Procedure *SeqNo:* 2501
Short Name: **UnplProc** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData

Definition: Indicate if an unplanned procedure was done during this operation.

LowValue: *UsualRangeLow:* *ACCFfield:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---|
| 1 | No |
| 2 | Yes, unsuspected patient disease or anatomy |
| 3 | Yes, surgical complication |

Long Name: Unplanned CABG *SeqNo:* 2502
Short Name: **UnplCABG** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a CABG.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Unplanned Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: UnplProc *DataLength:*

ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Unplanned Aortic Valve Procedure *SeqNo:* 2503
Short Name: **UnplAV** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was an aortic valve repair or replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Unplanned Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: UnplProc *DataLength:*

ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Unplanned Mitral Valve Procedure *SeqNo:* 2504
Short Name: **UnplMV** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a mitral valve repair or replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Unplanned Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: UnplProc *DataLength:*

ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Unplanned Aorta Procedure *SeqNo:* 2505
Short Name: **UnplAo** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was an aorta procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Unplanned Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: UnplProc *DataLength:*

ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Unplanned VAD *SeqNo:* 2506
Short Name: **UnplVAD** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether unplanned procedure was a VAD insertion.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Unplanned Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: UnplProc *DataLength:*

ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Unplanned Other Procedure *SeqNo:* 2507
Short Name: **UnplOth** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if other unplanned procedure was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Unplanned Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: UnplProc *DataLength:*

ParentValue: = "Yes, unsuspected patient disease or anatomy" or "Yes, surgical complication" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CPT-1 Code # 1 *SeqNo:* 2510
Short Name: **CPT1Code1** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the first CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text - Length exactly 5

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User or Automatic

Long Name: CPT-1 Code # 2 *SeqNo:* 2520
Short Name: **CPT1Code2** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the second CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 1 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code1 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 3 *SeqNo:* 2530
Short Name: **CPT1Code3** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the third CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 2 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code2 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 4 *SeqNo:* 2540
Short Name: **CPT1Code4** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the fourth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 3 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code3 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 5 *SeqNo:* 2550
Short Name: **CPT1Code5** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the fifth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 4 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code4 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 6 *SeqNo:* 2560
Short Name: **CPT1Code6** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the sixth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 5 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code5 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 7 *SeqNo:* 2570
Short Name: **CPT1Code7** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the seventh CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 6 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code6 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 8 *SeqNo:* 2580
Short Name: **CPT1Code8** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the eighth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 7 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code7 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 9 *SeqNo:* 2590
Short Name: **CPT1Code9** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the ninth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 8 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code8 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: CPT-1 Code # 10 *SeqNo:* 2600
Short Name: **CPT1Code10** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate, if applicable, the tenth CPT procedure code (CPT-1) pertaining to the surgery for which the data collection form was initiated.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPT-1 Code # 9 *Format:* Text - Length exactly 5

ParentShortName: CPT1Code9 *DataLength:*

ParentValue: Is Not Missing *Data Source:* User or Automatic

Long Name: OR Entry Date And Time *SeqNo:* 2610
Short Name: **OREntryDT** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the patient entered the operating room. If the procedure was performed in a location other than the OR, record the time when the sterile field, or its equivalent, was set up.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date and time in the format
mm/dd/yyyy hh:mm with the
time in 24-hour clock

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: OR Exit Date And Time *SeqNo:* 2620
Short Name: **ORExitDT** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the patient exits the operating room. If the procedure was performed in a location other than the OR, record the time when the sterile field, or its equivalent, was taken down.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date and time in the format
mm/dd/yyyy hh:mm with the
time in 24-hour clock

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Initial Intubation Date And Time *SeqNo:* 2670
Short Name: **IntubateDT** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support started. The following guidelines apply:

1. Capture the intubation closest to the surgical start time. If the patient was intubated upon admission and remained intubated until the surgical start time, capture this intubation's date and time.
2. If the patient was admitted intubated (intubated at another institution) and remained continually intubated until the surgical start time, capture the patient's admission date and time.
3. If the patient was admitted with a tracheostomy in place without ventilatory support, capture the date and time closest to the surgical start time that ventilatory support was initiated.
4. If the patient was admitted with a tracheostomy in place receiving chronic ventilatory support, capture the admission date and time.
5. If the intubation date and time is otherwise unknown, enter the date and time the patient entered the operating room.
6. Do not alter the previously established date and time that ventilatory support was initiated for scenarios including, but not limited to, interruptions in ventilatory support due to accidental extubation/de-cannulation, elective tube change etc.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date and time in the format
mm/dd/yyyy hh:mm with the
time in 24-hour clock

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Initial Extubation Date And Time *SeqNo:* 2680
Short Name: **ExtubateDT** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date (mm/dd/yyyy) and time (hh:mm) (24 hour clock) ventilatory support initially ceased after surgery. The following guidelines apply:

1. Capture the extubation closest to the surgical stop time.
2. If the patient has a tracheostomy and is separated from the mechanical ventilator postoperatively within the hospital admission, capture the date and time of separation from the mechanical ventilator closest to the surgical stop time.
3. If the patient expires while intubated or cannulated and on the ventilator, capture the date and time of expiration.
4. If patient is discharged on chronic ventilatory support, capture the date and time of discharge.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date and time in the format
mm/dd/yyyy hh:mm with the
time in 24-hour clock

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Skin Incision Start Date And Time *SeqNo:* 2690
Short Name: **SISStartDT** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the skin incision, or its equivalent, was made. For example, during bronchoscopy, one would utilize the bronchoscope insertion time.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date and time in the format
mm/dd/yyyy hh:mm with the
time in 24-hour clock

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Skin Incision Stop Date And Time *SeqNo:* 2700
Short Name: **SIS**StopDT *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date and time, to the nearest minute (using 24-hour clock), that the skin incision was closed, or its equivalent (i.e. removal of bronchoscope). If the patient leaves the operating room with an open incision, collect the time that the dressings were applied to the incision.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Date and time in the format mm/dd/yyyy hh:mm with the time in 24-hour clock

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: Appropriate Antibiotic Selection *SeqNo:* 2710
Short Name: **Abx**Select *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if there was documentation of an order for a first generation or second generation cephalosporin prophylactic antibiotic, documentation that it was given preoperatively or in the event of a documented allergy an alternate antibiotic choice is ordered and administered.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Yes	
2	No	
3	Exclusion	The reason for not ordering appropriate prophylactic antibiotic is documented in the medical record.

Long Name: Appropriate Antibiotic Administration Timing *SeqNo:* 2720
Short Name: **AbxTiming** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether prophylactic antibiotics were administered within one hour of surgical incision or start of procedure if no incision required (two hours if receiving vancomycin or fluoroquinolone).

The surgical incision time is the time of the first incision, regardless of location.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Yes	Given
2	No	Not given, no documented reason
3	Exclusion	Documented contraindication or rationale for not administering antibiotic in medical record

Long Name: Appropriate Antibiotic Discontinuation *SeqNo:* 2730
Short Name: **AbxDisc** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the prophylactic antibiotics were ordered to be discontinued OR were discontinued within 48 hours after surgery end time.

Determining the timeframe (within 48 hours) begins at the "surgical end time" - the time the patient leaves the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No
3	Exclusion

Long Name: CPB Utilization *SeqNo:* 2740
Short Name: **CPBUtl** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the level of CPB or coronary perfusion used during the procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	None	No CPB or coronary perfusion used during the procedure.

- 2 Combination
 - With or without CPB and/or with or without coronary perfusion at any time during the procedure (capture conversions from off-pump to on-pump only):
 - At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> CPB
 - At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> Coronary perfusion
 - At start of procedure: No CPB/No Coronary Perfusion -> conversion to -> Coronary perfusion -> conversion to -> CPB
- 3 Full
 - CPB or coronary perfusion was used for the entire procedure

Long Name: CPB Utilization - Combination Plan *SeqNo:* 2750
Short Name: **CPBCmb** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the combination procedure from off-pump to on-pump was a planned or an unplanned conversion.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Planned	The surgeon intended to treat with any of the combination options described in "CPB utilization".
2	Unplanned	The surgeon did not intend to treat with any of the combination options described in "CPB utilization".

Long Name: CPB Utilization - Unplanned Combination Reason *SeqNo:* 2760
Short Name: **CPBCmbr** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the reason that the procedure required the initiation of CPB and/or coronary perfusion.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPB Utilization -
 Combination Plan *Format:* Text (categorical values
 specified by STS)

ParentShortName: CPBCmb *DataLength:*

ParentValue: = "Unplanned" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Exposure/visualization
- 2 Bleeding
- 3 Inadequate size and/or diffuse
disease of distal vessel
- 4 Hemodynamic instability
(hypotension/arrhythmias)
- 5 Conduit quality and/or trauma
- 9 Other

Long Name: Cardiopulmonary Bypass Time *SeqNo:* 2770
Short Name: **PerfusTm** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total number of minutes that systemic return is diverted into the cardiopulmonary bypass (CPB) circuit and returned to the systemic system. This time period (Cardiopulmonary Bypass Time) includes all periods of cerebral perfusion and sucker bypass. This time period (Cardiopulmonary Bypass Time) excludes any circulatory arrest and modified ultrafiltration periods. If more than one period of CPB is required during the surgical procedure, the sum of all the CPB periods will equal the total number of CPB minutes.

LowValue: 1 *UsualRangeLow:* 1 *ACCField:* Not mapped
HighValue: 999 *UsualRangeHigh:* 300 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CPB Utilization *Format:* Integer
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

Long Name: Lowest Temp *SeqNo:* 2780
Short Name: **LwstTemp** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Record the patient's lowest core temperature during the procedure in degrees centigrade.

LowValue: 5.0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 40.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Real
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

Long Name: Lowest Hematocrit *SeqNo:* 2790
Short Name: **LwstHct** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData
Definition: Enter the lowest hematocrit recorded during procedure.
LowValue: 1.0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 50.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CPB Utilization *Format:* Real
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

Long Name: Cannulation Method - Aorta and Femoral/Jugular Vein *SeqNo:* 2800
Short Name: **CanAortFem** *Core:* No
Section Name: Operative *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the method of cannulation included Aorta and Femoral/Jugular Vein for cardiopulmonary bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Cannulation Method - Femoral Artery and Femoral/Jugular Vein *SeqNo:* 2810
Short Name: **CanFemFem** *Core:* No
Section Name: Operative *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the method of cannulation included Femoral Artery and Femoral/Jugular Vein for cardiopulmonary bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

Long Name: Cannulation Method - Aorta and Atrial/Caval *SeqNo:* 2820
Short Name: **CanAortAtr** *Core:* No
Section Name: Operative *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the method of cannulation included Aorta and Atrial/Caval for cardiopulmonary bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

Long Name: Cannulation Method - Femoral Artery and Atrial/Caval *SeqNo:* 2830
Short Name: **CanFemAtr** *Core:* No
Section Name: Operative *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the method of cannulation included Femoral Artery and Atrial/Caval for cardiopulmonary bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

Long Name: Cannulation Method - Other *SeqNo:* 2840
Short Name: **CanOther** *Core:* No
Section Name: Operative *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the method of cannulation included any other method for cardiopulmonary bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)
ParentShortName: CPBUtil *DataLength:*
ParentValue: = "Combination" or "Full" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

Long Name: Cannulation - Arterial Cannulation Site - Aortic *SeqNo:* 2851
Short Name: **CanArtStAort** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included the aorta.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Arterial Cannulation Site - Femoral *SeqNo:* 2852
Short Name: **CanArtStFem** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included a femoral artery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Arterial Cannulation Site - Axillary *SeqNo:* 2853
Short Name: **CanArtStAx** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included an axillary artery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Arterial Cannulation Site - Other *SeqNo:* 2854
Short Name: **CanArtStOth** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the arterial cannulation site included any other artery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Venous Cannulation Site - Femoral *SeqNo:* 2856
Short Name: **CanVenStFem** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a femoral vein.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Venous Cannulation Site - Jugular *SeqNo:* 2857
Short Name: **CanVenStJug** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a jugular vein.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Venous Cannulation Site - Right Atrial *SeqNo:* 2858
Short Name: **CanVenStRtA** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the right atrium.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Venous Cannulation Site - Left Atrial *SeqNo:* 2859
Short Name: **CanVenStLfA** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the left atrium.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Venous Cannulation Site - Pulmonary Vein *SeqNo:* 2861
Short Name: **CanVenStPulm** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included a pulmonary vein.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Venous Cannulation Site - Caval/Bicaval *SeqNo:* 2862
Short Name: **CanVenStBi** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included the superior and/or inferior vena cava.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cannulation - Venous Cannulation Site - Other *SeqNo:* 2863
Short Name: **CanVenStOth** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the venous (inflow) cannulation site included any other site.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CPB Utilization *Format:* Text (categorical values specified by STS)

ParentShortName: CPBUtil *DataLength:*

ParentValue: = "Combination" or "Full" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Circulatory Arrest *SeqNo:* 2865
Short Name: **CircArr** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not circulatory arrest was utilized during the procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Circulatory Arrest Time Without Cerebral Perfusion *SeqNo:* 2866
Short Name: **DHCATm** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total number of minutes of deep hypothermic circulatory arrest without cerebral perfusion. If more than one period of circulatory arrest is required during this surgical procedure, the sum of these periods is equal to the total duration of circulatory arrest.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 300 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Circulatory Arrest *Format:* Integer
ParentShortName: CircArr *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Circulatory Arrest With Cerebral Perfusion *SeqNo:* 2867
Short Name: **CPerfUtil** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether circulatory arrest with cerebral perfusion was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Circulatory Arrest *Format:* Text (categorical values specified by STS)
ParentShortName: CircArr *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Cerebral Perfusion Time *SeqNo:* 2868
Short Name: **CPerfTime** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total number of minutes cerebral perfusion was performed. This would include antegrade and/or retrograde cerebral perfusion strategies.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 999 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Circulatory Arrest With Cerebral Perfusion *Format:* Integer

ParentShortName: CPerfUtil *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Cerebral Perfusion Type *SeqNo:* 2869
Short Name: **CPerfTyp** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate type of cerebral perfusion utilized.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Circulatory Arrest With Cerebral Perfusion *Format:* Text (categorical values specified by STS)

ParentShortName: CPerfUtil *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|-------------------------------|
| 1 | Antegrade |
| 2 | Retrograde |
| 3 | Both antegrade and retrograde |

Long Name: Aortic Occlusion *SeqNo:* 2870
Short Name: **AortOccl** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the technique of aortic occlusion used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	None - beating heart
6	None - fibrillating heart
2	Aortic Crossclamp
3	Balloon Occlusion

Long Name: Cross Clamp Time (min) *SeqNo:* 2880
Short Name: **XClampTm** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total number of minutes that the coronary circulation is mechanically isolated from systemic circulation, either by an aortic cross clamp or systemic circulatory arrest.

LowValue: 0 *UsualRangeLow:* 0 *ACCField:* Not mapped
HighValue: 600 *UsualRangeHigh:* 180 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Aortic Occlusion *Format:* Integer

ParentShortName: AortOccl *DataLength:*

ParentValue: = "Aortic Crossclamp" or "Balloon Occlusion" *Data Source:* User

<i>Long Name:</i>	Cardioplegia	<i>SeqNo:</i>	2890
<i>Short Name:</i>	Cplegia	<i>Core:</i>	No
<i>Section Name:</i>	Operative	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether cardioplegia was used.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>		<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>		<i>DataLength:</i>	
<i>ParentValue:</i>		<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	

<i>Long Name:</i>	Cardioplegia Delivery	<i>SeqNo:</i>	2900
<i>Short Name:</i>	CplegiaDeliv	<i>Core:</i>	Yes
<i>Section Name:</i>	Operative	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate the delivery method of cardioplegia if used.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	<i>NQFField:</i>
		<i>ModelField:</i>	<i>PQRIField:</i>
<i>Parent Long Name:</i>		<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>		<i>DataLength:</i>	
<i>ParentValue:</i>		<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	None	
	2	Antegrade	
	3	Retrograde	
	4	Both	

Long Name: Cardioplegia Type *SeqNo:* 2901
Short Name: **CplegiaType** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of cardioplegia used.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Cardioplegia Delivery *Format:* Text (categorical values specified by STS)

ParentShortName: CplegiaDeliv *DataLength:*

ParentValue: = "Antegrade", "Retrograde" or "Both" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Blood
- 2 Crystalloid
- 3 Both
- 4 Other

Long Name: Cerebral Oximetry Used *SeqNo:* 2930
Short Name: **CerOxUsed** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether cerebral oximetry was used.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Pre-Induction Baseline Regional Oxygen Saturation - Left *SeqNo:* 2940
Short Name: **PreRSO2Lft** *Core:* Yes
Section Name: Operative *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the percent baseline left cerebral regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the cerebral oximeter will automatically select a baseline value from the first few minutes of the case.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Cerebral Oximetry Used *Format:* Integer

ParentShortName: CerOxUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Pre-Induction Baseline Regional Oxygen Saturation - Right *SeqNo:* 2950
Short Name: **PreRSO2Rt** *Core:* Yes
Section Name: Operative *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the percent baseline right cerebral regional oxygen saturation (rSO2) values at the beginning of the operation, when the patient is awake and functional. Patient can be sedated or on supplemental oxygen at the time measurement is taken. In the absence of a user-specified baseline, the cerebral oximeter will automatically select a baseline value from the first few minutes of the case.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Cerebral Oximetry Used *Format:* Integer

ParentShortName: CerOxUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Cumulative Saturation Below Threshold - Left *SeqNo:* 2960
Short Name: **CumulSatLft** *Core:* Yes
Section Name: Operative *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 75% of the baseline rSO₂ value (relative decline of 25% below baseline) for the left rSO₂. Calculated by the cerebral oximeter by multiplying the difference between the threshold and current rSO₂ values times the duration that rSO₂ is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 9999 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Cerebral Oximetry Used *Format:* Integer

ParentShortName: CerOxUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Cumulative Saturation Below Threshold - Right *SeqNo:* 2970
Short Name: **CumulSatRt** *Core:* Yes
Section Name: Operative *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the cumulative integral of time and depth of desaturation events below the threshold of 75% of the baseline rSO₂ value (relative decline of 25% below baseline) for the right rSO₂. Calculated by the cerebral oximeter by multiplying the difference between the threshold and current rSO₂ values times the duration that rSO₂ is below the threshold. Values are accumulated throughout the operation. Units are minute-%. This is also called area under the curve (AUC).

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 9999 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Cerebral Oximetry Used *Format:* Integer

ParentShortName: CerOxUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Cerebral Oximeter Provided The First Indication *SeqNo:* 2980
Short Name: **COFirstInd** *Core:* Yes
Section Name: Operative *Harvest:* Optional

DBTableName AdultData

Definition: Indicate whether the cerebral oximeter provided the first indication of a technical problem or physiological change in the patient that could potentially lead to an adverse patient outcome.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Cerebral Oximetry Used *Format:* Text (categorical values specified by STS)

ParentShortName: CerOxUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Skin Closure Regional Oxygen Saturation - Left *SeqNo:* 2990
Short Name: **SCRSO2Lft** *Core:* Yes
Section Name: Operative *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the left cerebral regional oxygen saturation of blood (rSO2) value at the time of skin closure at the end of the operation. Units are %.

LowValue: 1 *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: 99 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Cerebral Oximetry Used *Format:* Integer

ParentShortName: CerOxUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Skin Closure Regional Oxygen Saturation - Right *SeqNo:* 3000
Short Name: **SCRSO2Rt** *Core:* Yes
Section Name: Operative *Harvest:* Optional

DBTableName AdultData

Definition: Indicate the right cerebral regional oxygen saturation of blood (rSO2) value at the time of skin closure at the end of the operation. Units are %.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Cerebral Oximetry Used *Format:* Integer

ParentShortName: CerOxUsed *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Concentric Calcification *SeqNo:* 3005
Short Name: **ConCalc** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether concentric calcification of the aorta was discovered preoperatively or intraoperatively using imaging or palpation.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Echo Assessment of Ascending Aorta/Arch *SeqNo:* 3010
Short Name: **AsmtAscAA** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the Ascending Aorta/Arch was evaluated during surgery using TEE or epiaortic ultrasound.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Assessment of Aorta Disease *SeqNo:* 3020
Short Name: **AsmtAoDx** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate highest grade of disease in the ascending aorta indicated on epiaortic ultrasound or TEE.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Echo Assessment of Ascending Aorta/Arch *Format:* Text (categorical values specified by STS)

ParentShortName: AsmtAscAA *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Normal Aorta
2	Extensive intimal thickening
3	Protruding Atheroma < 5 mm
4	Protruding Atheroma >= 5 mm
5	Mobile plaques

6 Not documented

Long Name: Assessment Altered Plan *SeqNo:* 3030
Short Name: **AsmtAPIn** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether echographic aortic assessment changed cannulation strategy or surgical plan.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Echo Assessment of Ascending Aorta/Arch *Format:* Text (categorical values specified by STS)

ParentShortName: AsmtAscAA *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Intraop Blood Products *SeqNo:* 3040
Short Name: **IBldProd** *Core:* Yes
Section Name: Operative *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether blood products were transfused any time intraoperatively during the initial surgery. Intraoperatively is defined as any blood started inside of the OR.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Intraop Blood Products Refused *SeqNo:* 3050
Short Name: **IBldProdRef** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient or family refused blood products.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Intraop Blood Products *Format:* Text (categorical values specified by STS)

ParentShortName: IBldProd *DataLength:*

ParentValue: = "No" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Intraop Blood Products - RBC Units *SeqNo:* 3060
Short Name: **IBdRBCU** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of packed red blood cells that were transfused intraoperatively.

Do not include autologous, cell-saver, pump-residual or chest tube recirculated blood.

LowValue: 0 *UsualRangeLow:* 0 *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* 10 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Intraop Blood Products *Format:* Integer

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Intraop Blood Products - FFP Units *SeqNo:* 3070
Short Name: **IBdFFPU** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of fresh frozen plasma that were transfused intraoperatively.

LowValue: 0 *UsualRangeLow:* 0 *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* 10 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Intraop Blood Products *Format:* Integer

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Intraop Blood Products - Cryo Units *SeqNo:* 3080
Short Name: **IBdCryoU** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of cryoprecipitate that were transfused intraoperatively.

One bag of cryo = one unit.

The number of units is not volume dependent.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Intraop Blood Products *Format:* Integer

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Intraop Blood Products - Platelet Units *SeqNo:* 3090
Short Name: **IBdPlatU** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of platelets that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Intraop Blood Products *Format:* Integer

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Intraop Blood Products - Factor VIIa *SeqNo:* 3091
Short Name: **IBdFactorVII** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the amount of Factor VIIa that was given intraoperatively. Units are measured in micrograms per kilogram.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 1000 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Intraop Blood Products *Format:* Integer

ParentShortName: IBldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Intraop Medications - Aprotinin *SeqNo:* 3100
Short Name: **IMedAprot** *Core:* No
Section Name: Operative *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the patient received Aprotinin in the operating room.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

Long Name: Intraop Medications - Aprotinin - Dose *SeqNo:* 3110
Short Name: **IMedAprotD** *Core:* No
Section Name: Operative *Harvest:* No
DBTableName AdultData
Definition: Indicate the dosage of the Aprotinin the patient received in the operating room.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: Intraop Medications - Aprotinin *Format:* Text (categorical values specified by STS)
ParentShortName: IMedAprot *DataLength:*
ParentValue: = "Yes" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Full dose
 2 Half dose

Long Name: Intraop Antifibrinolytic Medications - Epsilon Amino-Caproic Acid *SeqNo:* 3120
Short Name: **IMedEACA** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received Epsilon Amino-Caproic Acid in the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Intraop Medications - Desmopressin *SeqNo:* 3130
Short Name: **IMedDesmo** *Core:* No
Section Name: Operative *Harvest:* No

DBTableName AdultData

Definition: Indicate whether the patient received Desmopressin in the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Intraop Antifibrinolytic Medications - Tranexamic Acid *SeqNo:* 3140
Short Name: **IMedTran** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient received Tranexamic Acid in the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Intraop TEE post procedure *SeqNo:* 3157
Short Name: **InOpTEE** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether intraoperative TEE was performed following procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post Repair TEE Aortic Insufficiency *SeqNo:* 3158
Short Name: **PRepAR** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of aortic regurgitation found on post CPB intraop TEE. Mild-to-Moderate should be coded as moderate; moderate to severe should be coded as severe. Amount of AR should be the LAST ASSESSMENT before leaving the operating room. For example: if patient has aortic repair, separates from CPB and finds moderate AR, surgeon goes back on and re-fixes, comes off and finds no AR, it should be recorded as none.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Intraop TEE post procedure *Format:* Text (categorical values specified by STS)

ParentShortName: InOpTEE *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 None
- 2 Trace/trivial
- 3 Mild
- 4 Moderate
- 5 Severe

Long Name: Post Repair TEE Mitral Insufficiency *SeqNo:* 3159
Short Name: **PRepMR** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of mitral regurgitation found on post CPB intraop TEE. Mild-to-Moderate should be coded as moderate; moderate to severe should be coded as severe. Amount of MR should be the LAST ASSESSMENT before leaving the operating room. For example: if patient has mitral repair, separates from CPB and finds moderate MR, surgeon goes back on and re-fixes, comes off and finds no MR, it should be recorded as none.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Intraop TEE post procedure *Format:* Text (categorical values specified by STS)

ParentShortName: InOpTEE *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 None
- 2 Trace/trivial
- 3 Mild
- 4 Moderate
- 5 Severe

Long Name: Post Repair TEE Tricuspid Insufficiency *SeqNo:* 3161
Short Name: **PRepTR** *Core:* Yes
Section Name: Operative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of tricuspid regurgitation found on post CPB intraop TEE. Mild-to-Moderate should be coded as moderate; moderate to severe should be coded as severe. Amount of TR should be the LAST ASSESSMENT before leaving the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Intraop TEE post procedure *Format:* Text (categorical values specified by STS)

ParentShortName: InOpTEE *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 None
- 2 Trace/trivial
- 3 Mild
- 4 Moderate
- 5 Severe

Long Name: Hybrid Procedure CAB PCI *SeqNo:* 3165
Short Name: **CABHybrPCI** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a hybrid coronary surgical and interventional cardiology procedure was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Hybrid Status *SeqNo:* 3170
Short Name: **HybrStat** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate Status of Hybrid procedure.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Hybrid Procedure CAB PCI *Format:* Text (categorical values specified by STS)
ParentShortName: CABHybrPCI *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u> <u>Value:</u>	<u>Definition:</u>
1 Planned - concurrent	Planned, performed same setting
2 Planned - staged	Planned, performed same hospital admission
3 Unplanned	Unplanned, performed after incomplete revascularization or graft closure during the same hospital admission

Long Name: Hybrid Procedure *SeqNo:* 3180
Short Name: **HybrProc** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate PCI Procedure performed.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Hybrid Procedure CAB PCI *Format:* Text (categorical values specified by STS)
ParentShortName: CABHybrPCI *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u> <u>Value:</u>
1 Angioplasty
2 Stent

Long Name: Dist Anast - Art # *SeqNo:* 3190
Short Name: **DistArt** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses with arterial conduits, whether IMA, GEPA, radial artery, etc.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 9 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: CAB *Format:* Integer

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Dist Anast - Vein # *SeqNo:* 3200
Short Name: **DistVein** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses with venous conduits.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 9 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: CAB *Format:* Integer

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Dist Anast - Vein Harvest Technique *SeqNo:* 3205
Short Name: **DistVeinHTech** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the technique used to harvest the vein graft(s).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Dist Anast - Vein # *Format:* Text (categorical values specified by STS)

ParentShortName: DistVein *DataLength:*

ParentValue: > 0 *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Endoscopic
- 2 Direct Vision (open)
- 3 Both
- 4 Cryopreserved

Long Name: Saphenous Vein Harvest Time *SeqNo:* 3206
Short Name: **SaphHrvstT** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total time in minutes for saphenous vein harvest.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 120 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Dist Anast - Vein Harvest Technique *Format:* Integer

ParentShortName: DistVeinHTech *DataLength:*

ParentValue: = "Endoscopic", "Direct Vision (open)", or "Both" *Data Source:* User

Long Name: Saphenous Vein Preparation Time *SeqNo:* 3207
Short Name: **SaphPrepT** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total amount of vein preparation time (e.g., side branch ligation, etc.) in minutes.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 60 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Dist Anast - Vein Harvest Technique *Format:* Integer

ParentShortName: DistVeinHTech *DataLength:*

ParentValue: = "Endoscopic", "Direct Vision (open)", or "Both" *Data Source:* User

Long Name: IMA Artery Used *SeqNo:* 3210
Short Name: **IMAArtUs** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate which, if any, Internal Mammary Artery(ies) (IMA) were used for grafts.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* Yes

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Left IMA
- 2 Right IMA
- 3 Both IMAs
- 4 No IMA

Long Name: Reason for No IMA *SeqNo:* 3220
Short Name: **NoIMARsn** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate PRIMARY reason Internal Mammary artery was not used as documented in medical record.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: IMA Artery Used *Format:* Text (categorical values specified by STS)

ParentShortName: IMAArtUs *DataLength:*

ParentValue: = "No IMA" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 The IMA is not a suitable conduit due to size or flow
- 2 Subclavian stenosis
- 3 Previous cardiac or thoracic surgery
- 4 Previous mediastinal radiation
- 5 Emergent or salvage procedure
- 6 No LAD disease

Long Name: IMA Dist Anast # *SeqNo:* 3230
Short Name: **NumIMADA** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total number of distal anastomoses done using IMA grafts.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 6 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: IMA Artery Used *Format:* Integer

ParentShortName: IMAArtUs *DataLength:*

ParentValue: = "Left IMA", "Right IMA", or "Both IMAs" *Data Source:* User

Long Name: IMA Harvest Technique *SeqNo:* 3240
Short Name: **IMATechn** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the technique of IMA harvest.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: IMA Artery Used *Format:* Text (categorical values specified by STS)

ParentShortName: IMAArtUs *DataLength:*

ParentValue: = "Left IMA", "Right IMA", *Data Source:* User
 or "Both IMAs"

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|----------------------|
| 2 | Direct Vision (open) |
| 3 | Thoracoscopy |
| 4 | Combination |
| 5 | Robotic Assisted |

Long Name: Radial Artery Used *SeqNo:* 3250
Short Name: **RadArtUs** *Core:* No
Section Name: Coronary Bypass *Harvest:* No

DBTableName AdultData

Definition: Indicate which radial artery(ies) was/were used for grafts:
 No Radial artery
 Left Radial artery
 Right Radial artery
 Both Radial arteries

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
|--------------|---------------|

1	No Radial
2	Left Radial
3	Right Radial
4	Both Radials

Long Name: Number of Radial Arteries Used *SeqNo:* 3260
Short Name: **NumRadArtUs** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the number of radial artery(ies) that were used for grafts.
LowValue: 0 *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: 2 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB *Format:* Integer
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Radial Dist Anast # *SeqNo:* 3270
Short Name: **NumRadDA** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the total number of distal anastomoses done using radial artery grafts.
LowValue: 0 *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: 6 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: Number of Radial Arteries Used *Format:* Integer
ParentShortName: NumRadArtUs *DataLength:*
ParentValue: > 0 *Data Source:* User

Long Name: Radial Dist Anast Harvest Technique *SeqNo:* 3280
Short Name: **RadHTech** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the technique used to harvest the radial artery(s).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Radial Dist Anast # *Format:* Text (categorical values specified by STS)

ParentShortName: NumRadDA *DataLength:*

ParentValue: > 0 *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|----------------------|
| 1 | Endoscopic |
| 2 | Direct Vision (open) |
| 3 | Both |

Long Name: Radial Artery Harvest Time *SeqNo:* 3285
Short Name: **RadHrvstT** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the total time in minutes for radial artery harvesting.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 120 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Radial Dist Anast # *Format:* Integer

ParentShortName: NumRadDA *DataLength:*

ParentValue: > 0 *Data Source:* User

Long Name: Radial Artery Preparation Time *SeqNo:* 3286
Short Name: **RadPrepT** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the total amount of artery preparation time (e.g., side branch ligation, etc.) in minutes.
LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 60 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Radial Dist Anast # *Format:* Integer
ParentShortName: NumRadDA *DataLength:*
ParentValue: > 0 *Data Source:* User

Long Name: GEPA Dist Anast # *SeqNo:* 3290
Short Name: **NumGEPDA** *Core:* No
Section Name: Coronary Bypass *Harvest:* No
DBTableName: AdultData
Definition: Indicate the total number of distal anastomoses done using gastro-epiploic artery grafts.
LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 6 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CAB *Format:* Integer
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Other Arterial Distal Anastomoses # *SeqNo:* 3300
Short Name: **NumOArtD** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the number of arterial distal anastomoses that were used, other than radial or IMA.
LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 6 *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CAB *Format:* Integer
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Anastomotic Device Used *SeqNo:* 3310
Short Name: **AnasDevU** *Core:* No
Section Name: Coronary Bypass *Harvest:* No
DBTableName AdultData
Definition: Indicate whether an anastomotic device/material was used for proximal or distal anastomoses such as glue, magnets, clips, stapler, etc. Exclude sutures.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: CAB *Format:* Text (categorical values specified by STS)
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Anastomotic Device *SeqNo:* 3320
Short Name: **AnasDev** *Core:* No
Section Name: Coronary Bypass *Harvest:* No
DBTableName AdultData
Definition: Indicate which type of anastomotic device was used. If more than one device used, indicate device used on Distal Anastomosis.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: Anastomotic Device Used *Format:* Text (categorical values specified by STS)
ParentShortName: AnasDevU *DataLength:*
ParentValue: = "Yes" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Glue
 2 Magnets
 3 Clips
 4 Staples
 9 Other

Long Name: CAB Native Coronary Disease Location 01 *SeqNo:* 3355
Short Name: **CABDisLoc01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the native coronary disease location.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB *Format:* Text (categorical values specified by STS)
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Left Main
 2 Proximal LAD

- 3 Mid LAD
- 4 Distal LAD
- 5 Diagonal 1
- 6 Diagonal 2
- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 01 *SeqNo:* 3356
Short Name: **CABPctSten01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the highest percentage of stenosis found in the native vessel.
LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB *Format:* Integer
ParentShortName: OpCAB *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 01 *SeqNo:* 3357
Short Name: **CABPrevCon01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes - Diseased
2	Yes - No disease
3	No previous conduit

Long Name: CAB Proximal Site 01 *SeqNo:* 3360
Short Name: **CABProximalSite01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	In Situ Mammary
2	Ascending aorta
3	Descending aorta
4	Subclavian artery
5	Innominate artery

- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 01 *SeqNo:* 3370
Short Name: **CABProxTech01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 5 In Situ Mammary
- 1 Running
- 2 Interrupted
- 3 Anastomotic Device
- 4 Anastomotic Assist Device

Long Name: CAB Conduit 01 *SeqNo:* 3380
Short Name: **CABConduit01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA
4	Free IMA
5	Radial artery
6	Other arteries, homograft

Long Name: CAB Distal Site 01 *SeqNo:* 3390
Short Name: **CABDistSite01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal

3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 01 *SeqNo:* 3400
Short Name: **CABDistTech01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 01 *SeqNo:* 3410
Short Name: **CABDistPos01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 01 *SeqNo:* 3420
Short Name: **CABEndArt01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 01 *SeqNo:* 3430
Short Name: **CABHyPCI01** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 02 *SeqNo:* 3440
Short Name: **CAB02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a second Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB *Format:* Text (categorical values specified by STS)

ParentShortName: OpCAB *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

<i>Long Name:</i>	CAB Native Coronary Disease Location 02	<i>SeqNo:</i>	3445
<i>Short Name:</i>	CABDisLoc02	<i>Core:</i>	Yes
<i>Section Name:</i>	Coronary Bypass	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate the native coronary disease location.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	<i>NQFField:</i>
		<i>ModelField:</i>	<i>PQRIField:</i>
<i>Parent Long Name:</i>	CAB 02	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	CAB02	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User

Harvest Codes:

Code: Value:

- 1 Left Main
- 2 Proximal LAD
- 3 Mid LAD
- 4 Distal LAD
- 5 Diagonal 1
- 6 Diagonal 2
- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 02 *SeqNo:* 3446
Short Name: **CABPctSten02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Integer

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 02 *SeqNo:* 3447
Short Name: **CABPrevCon02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes - Diseased
- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 02 *SeqNo:* 3450
Short Name: **CABProximalSite02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate proximal site of the bypass graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 02 *SeqNo:* 3460
Short Name: **CABProxTech02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 02 *SeqNo:* 3470
Short Name: **CABConduit02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 02 *SeqNo:* 3480
Short Name: **CABDistSite02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB02 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 02 *SeqNo:* 3490
Short Name: **CABDistTech02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 02 *SeqNo:* 3500
Short Name: **CABDistPos02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 02 *SeqNo:* 3510
Short Name: **CABEndArt02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values
 specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 02 *SeqNo:* 3520
Short Name: **CABHyPCI02** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values
 specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 03 *SeqNo:* 3530
Short Name: **CAB03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a third Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 02 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB02 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 03 *SeqNo:* 3535
Short Name: **CABDisLoc03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 03 *SeqNo:* 3536
Short Name: **CABPctSten03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the highest percentage of stenosis found in the native vessel.
LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 03 *Format:* Integer
ParentShortName: CAB03 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 03 *SeqNo:* 3537
Short Name: **CABPrevCon03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB03 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 03 *SeqNo:* 3540
Short Name: **CABProximalSite03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB03 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
 - 2 Ascending aorta
 - 3 Descending aorta
 - 4 Subclavian artery
 - 5 Innominate artery
 - 6 T-graft off SVG
 - 7 T-graft off Radial
 - 8 T-graft off LIMA
 - 9 T-graft off RIMA
-

Long Name: CAB Proximal Technique 03 *SeqNo:* 3550
Short Name: **CABProxTech03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 03 *SeqNo:* 3560
Short Name: **CABConduit03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 03 *SeqNo:* 3570
Short Name: **CABDistSite03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB03 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 03 *SeqNo:* 3580
Short Name: **CABDistTech03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 03 *SeqNo:* 3590
Short Name: **CABDistPos03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 03 *SeqNo:* 3600
Short Name: **CABEndArt03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 03 *SeqNo:* 3610
Short Name: **CABHyPCI03** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 04 *SeqNo:* 3620
Short Name: **CAB04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a fourth Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 03 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB03 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 04 *SeqNo:* 3625
Short Name: **CABDisLoc04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 04 *SeqNo:* 3626
Short Name: **CABPctSten04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Integer
ParentShortName: CAB04 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 04 *SeqNo:* 3627
Short Name: **CABPrevCon04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB04 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 04 *SeqNo:* 3630
Short Name: **CABProximalSite04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB04 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 04 *SeqNo:* 3640
Short Name: **CABProxTech04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 04 *SeqNo:* 3650
Short Name: **CABConduit04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 04 *SeqNo:* 3660
Short Name: **CABDistSite04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB04 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 04 *SeqNo:* 3670
Short Name: **CABDistTech04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 04 *SeqNo:* 3680
Short Name: **CABDistPos04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 04 *SeqNo:* 3690
Short Name: **CABEndArt04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 04 *SeqNo:* 3700
Short Name: **CABHyPCI04** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 05 *SeqNo:* 3710
Short Name: **CAB05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a fifth Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 04 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB04 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 05 *SeqNo:* 3715
Short Name: **CABDisLoc05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 05 *SeqNo:* 3716
Short Name: **CABPctSten05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Integer
ParentShortName: CAB05 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 05 *SeqNo:* 3717
Short Name: **CABPrevCon05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB05 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 05 *SeqNo:* 3720
Short Name: **CABProximalSite05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB05 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
 - 2 Ascending aorta
 - 3 Descending aorta
 - 4 Subclavian artery
 - 5 Innominate artery
 - 6 T-graft off SVG
 - 7 T-graft off Radial
 - 8 T-graft off LIMA
 - 9 T-graft off RIMA
-

Long Name: CAB Proximal Technique 05 *SeqNo:* 3730
Short Name: **CABProxTech05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 05 *SeqNo:* 3740
Short Name: **CABConduit05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 05 *SeqNo:* 3750
Short Name: **CABDistSite05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB05 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 05 *SeqNo:* 3760
Short Name: **CABDistTech05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 05 *SeqNo:* 3770
Short Name: **CABDistPos05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 05 *SeqNo:* 3780
Short Name: **CABEndArt05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values
 specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 05 *SeqNo:* 3790
Short Name: **CABHyPCI05** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values
 specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 06 *SeqNo:* 3800
Short Name: **CAB06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a sixth Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 05 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB05 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 06 *SeqNo:* 3805
Short Name: **CABDisLoc06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 06 *SeqNo:* 3806
Short Name: **CABPctSten06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Integer
ParentShortName: CAB06 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 06 *SeqNo:* 3807
Short Name: **CABPrevCon06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB06 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 06 *SeqNo:* 3810
Short Name: **CABProximalSite06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB06 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
 - 2 Ascending aorta
 - 3 Descending aorta
 - 4 Subclavian artery
 - 5 Innominate artery
 - 6 T-graft off SVG
 - 7 T-graft off Radial
 - 8 T-graft off LIMA
 - 9 T-graft off RIMA
-

Long Name: CAB Proximal Technique 06 *SeqNo:* 3820
Short Name: **CABProxTech06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 06 *SeqNo:* 3830
Short Name: **CABConduit06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 06 *SeqNo:* 3840
Short Name: **CABDistSite06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB06 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 06 *SeqNo:* 3850
Short Name: **CABDistTech06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 06 *SeqNo:* 3860
Short Name: **CABDistPos06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 06 *SeqNo:* 3870
Short Name: **CABEndArt06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 06 *SeqNo:* 3880
Short Name: **CABHyPCI06** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 07 *SeqNo:* 3890
Short Name: **CAB07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a seventh Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 06 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB06 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 07 *SeqNo:* 3895
Short Name: **CABDisLoc07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 07 *SeqNo:* 3896
Short Name: **CABPctSten07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Integer
ParentShortName: CAB07 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 07 *SeqNo:* 3897
Short Name: **CABPrevCon07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB07 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 07 *SeqNo:* 3900
Short Name: **CABProximalSite07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB07 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 07 *SeqNo:* 3910
Short Name: **CABProxTech07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 07 *SeqNo:* 3920
Short Name: **CABConduit07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 07 *SeqNo:* 3930
Short Name: **CABDistSite07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate distal insertion site of bypass.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 07 *SeqNo:* 3940
Short Name: **CABDistTech07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 07 *SeqNo:* 3950
Short Name: **CABDistPos07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 07 *SeqNo:* 3960
Short Name: **CABEndArt07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 07 *SeqNo:* 3970
Short Name: **CABHyPCI07** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 08 *SeqNo:* 3980
Short Name: **CAB08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a eighth Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 07 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB07 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 08 *SeqNo:* 3985
Short Name: **CABDisLoc08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 08 *SeqNo:* 3986
Short Name: **CABPctSten08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Integer
ParentShortName: CAB08 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 08 *SeqNo:* 3987
Short Name: **CABPrevCon08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB08 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 08 *SeqNo:* 3990
Short Name: **CABProximalSite08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB08 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 08 *SeqNo:* 4000
Short Name: **CABProxTech08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 08 *SeqNo:* 4010
Short Name: **CABConduit08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 08 *SeqNo:* 4020
Short Name: **CABDistSite08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB08 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 08 *SeqNo:* 4030
Short Name: **CABDistTech08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 08 *SeqNo:* 4040
Short Name: **CABDistPos08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 08 *SeqNo:* 4050
Short Name: **CABEndArt08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 08 *SeqNo:* 4060
Short Name: **CABHyPCI08** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 09 *SeqNo:* 4070
Short Name: **CAB09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a ninth Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 08 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB08 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 09 *SeqNo:* 4075
Short Name: **CABDisLoc09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 09 *SeqNo:* 4076
Short Name: **CABPctSten09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Integer
ParentShortName: CAB09 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 09 *SeqNo:* 4077
Short Name: **CABPrevCon09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB09 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 09 *SeqNo:* 4080
Short Name: **CABProximalSite09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB09 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 09 *SeqNo:* 4090
Short Name: **CABProxTech09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 09 *SeqNo:* 4100
Short Name: **CABConduit09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 09 *SeqNo:* 4110
Short Name: **CABDistSite09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB09 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 09 *SeqNo:* 4120
Short Name: **CABDistTech09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 09 *SeqNo:* 4130
Short Name: **CABDistPos09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 09 *SeqNo:* 4140
Short Name: **CABEndArt09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values
 specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 09 *SeqNo:* 4150
Short Name: **CABHyPCI09** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values
 specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

Long Name: CAB 10 *SeqNo:* 4160
Short Name: **CAB10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a tenth Coronary Artery Bypass graft was done.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 09 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB09 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Native Coronary Disease Location 10 *SeqNo:* 4165
Short Name: **CABDisLoc10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the native coronary disease location.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB10 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Left Main
2	Proximal LAD
3	Mid LAD
4	Distal LAD
5	Diagonal 1
6	Diagonal 2

- 7 Circumflex
- 8 OM 1
- 9 OM 2
- 10 OM 3
- 11 RCA
- 12 PDA
- 13 PLB
- 14 AM branches
- 15 Ramus

Long Name: CAB Highest Percent Stenosis In Native Vessel 10 *SeqNo:* 4166
Short Name: **CABPctSten10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest percentage of stenosis found in the native vessel.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Integer
ParentShortName: CAB10 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: CAB Previous Conduit 10 *SeqNo:* 4167
Short Name: **CABPrevCon10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate presence of coronary artery bypass conduit for this vessel and whether or not it is diseased.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB10 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes - Diseased

- 2 Yes - No disease
- 3 No previous conduit

Long Name: CAB Proximal Site 10 *SeqNo:* 4170
Short Name: **CABProximalSite10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate proximal site of the bypass graft.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB10 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 In Situ Mammary
- 2 Ascending aorta
- 3 Descending aorta
- 4 Subclavian artery
- 5 Innominate artery
- 6 T-graft off SVG
- 7 T-graft off Radial
- 8 T-graft off LIMA
- 9 T-graft off RIMA

Long Name: CAB Proximal Technique 10 *SeqNo:* 4180
Short Name: **CABProxTech10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for proximal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB10 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
5	In Situ Mammary
1	Running
2	Interrupted
3	Anastomotic Device
4	Anastomotic Assist Device

Long Name: CAB Conduit 10 *SeqNo:* 4190
Short Name: **CABConduit10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the conduit type used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB10 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Vein graft
2	In Situ LIMA
3	In Situ RIMA

- 4 Free IMA
- 5 Radial artery
- 6 Other arteries, homograft

Long Name: CAB Distal Site 10 *SeqNo:* 4200
Short Name: **CABDistSite10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes
DBTableName AdultData
Definition: Indicate distal insertion site of bypass.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)
ParentShortName: CAB10 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RCA	Right Coronary Artery
2	AM	Acute Marginal
3	PDA	Posterior Descending Artery
4	PLB	Posterolateral Branch
5	Prox LAD	Proximal Left Anterior Descending
6	Mid LAD	Middle Left Anterior Descending
7	Distal LAD	Distal Left Anterior Descending
8	Diag 1	First Diagonal
9	Diag 2	Second Diagonal
10	Ramus	Ramus Intermedius
11	OM 1	First Obtuse Marginal
12	OM 2	Second Obtuse Marginal
13	OM 3	Third Obtuse Marginal
14	Other	

Long Name: CAB Distal Technique 10 *SeqNo:* 4210
Short Name: **CABDistTech10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate technique used for distal anastomosis.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB10 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Running
2	Interrupted
3	Clips
4	Anastomotic Device

Long Name: CAB Distal Position 10 *SeqNo:* 4220
Short Name: **CABDistPos10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate anastomotic position.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB10 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	End to side
2	Sequential (side to side)

Long Name: CAB Endarterectomy 10 *SeqNo:* 4230
Short Name: **CABEndArt10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether endarterectomy was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB10 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: CAB Hybrid PCI 10 *SeqNo:* 4240
Short Name: **CABHyPCI10** *Core:* Yes
Section Name: Coronary Bypass *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether hybrid PCI (Percutaneous Coronary Intervention) procedure was performed in conjunction with this graft.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: CAB 10 *Format:* Text (categorical values specified by STS)

ParentShortName: CAB10 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Angioplasty
3	Stent

<i>Long Name:</i>	VS-Aortic Proc-Procedure	<i>SeqNo:</i>	4250
<i>Short Name:</i>	OpAortic	<i>Core:</i>	No
<i>Section Name:</i>	Valve Surgery	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether a surgical procedure was done or not done on the Aortic Valve. Select one of the following:		
	<ul style="list-style-type: none"> a. No b. Replacement c. Repair/Reconstruction d. Root Reconstruction with Valve Conduit e. Replacement + Aortic Graft Conduit (not a valve conduit) f. Root Reconstruction w/ Valve Sparing g. Resuspension Aortic Valve with Replacement of Ascending aorta h. Resuspension Aortic Valve without Replacement of Ascending aorta i. Resection Sub-Aortic Stenosis 		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	Yes
<i>Parent Long Name:</i>	Valve	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	OpValve	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	No
2	Replacement
3	Repair/Reconstruction
4	Root Reconstruction with Valve Conduit
8	Replacement + Aortic Graft Conduit (not a valve conduit)
5	Root Reconstruction with Valve Sparing
9	Resuspension Aortic Valve with Replacement of Ascending aorta
10	Resuspension Aortic Valve without Replacement of Ascending aorta
7	Resection Sub-Aortic Stenosis

Long Name: VS-Mitral Proc-Procedure *SeqNo:* 4260
Short Name: **OpMitral** *Core:* No
Section Name: Valve Surgery *Harvest:* No

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done or not done on the Mitral Valve. Select one of the following:
 a. No
 b. Annuloplasty only
 c. Replacement
 d. Reconstruction with Annuloplasty
 e. Reconstruction without Annuloplasty

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|-------------------------------------|
| 1 | No |
| 2 | Annuloplasty Only |
| 3 | Replacement |
| 4 | Reconstruction with Annuloplasty |
| 5 | Reconstruction without Annuloplasty |

Long Name: VS-Aortic Valve *SeqNo:* 4270
Short Name: **VSAV** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether an aortic valve procedure was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Aortic Valve Procedure *SeqNo:* 4280
Short Name: **VSAVPr** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate procedure performed on aortic valve and/or ascending aorta.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSAV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Replacement
2	Repair / Reconstruction
3	Root Reconstruction with valved conduit
4	Replacement and insertion aortic non-valved conduit
5	Resuspension AV without

- replacement of ascending aorta
- 6 Resuspension AV with replacement of ascending aorta
- 7 Apico-aortic conduit (Aortic valve bypass)
- 8 Autograft with pulmonary valve- Ross procedure
- 9 Homograft
- 10 Valve sparing root reimplantation (David)
- 11 Valve sparing root remodeling (Yacoub)

Long Name: VS-Aortic Valve Repair - Commissural Annuloplasty *SeqNo:* 4282
Short Name: **VSAVRComA** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included a commissural annuloplasty.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: VS-Aortic Valve Repair - Ring Annuloplasty *SeqNo:* 4283
Short Name: **VSAVRRingA** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included a ring annuloplasty.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Aortic Valve Repair - Leaflet Plication *SeqNo:* 4284
Short Name: **VSAVRLPlic** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet plication.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Aortic Valve Repair - Leaflet Resection *SeqNo:* 4285
Short Name: **VSAVRLResect** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet resection.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Aortic Valve Repair - Leaflet Free Edge Reinforcement (PTFE) Suture *SeqNo:* 4286
Short Name: **VSAVRPTFE** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet free edge reinforcement (PTFE) suture.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Aortic Valve Repair - Leaflet Pericardial Patch *SeqNo:* 4287
Short Name: **VSAVRLPPatch** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet pericardial patch.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Aortic Valve Repair - Leaflet Commissural Resuspension Suture *SeqNo:* 4288
Short Name: **VSAVRComRS** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet commissural resuspension suture.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Aortic Valve Repair - Leaflet Debridement *SeqNo:* 4289
Short Name: **VSAVRDeb** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included leaflet debridement.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Aortic Valve Repair - Division of Fused Leaflet Raphe *SeqNo:* 4290
Short Name: **VSAVRRaphe** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included division of fused leaflet raphe.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSAVPr *DataLength:*

ParentValue: = "Repair / Reconstruction" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Transcatheter Valve Replacement *SeqNo:* 4295
Short Name: **VSTCV** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the aortic valve repair procedure included placement of a transcatheter valve.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSAV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Transcatheter Valve Replacement Approach *SeqNo:* 4300
Short Name: **VSTCVR** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate transcatheter valve replacement approach.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Transcatheter Valve Replacement *Format:* Text (categorical values specified by STS)

ParentShortName: VSTCV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Transapical
2	Transaxillary
3	Transfemoral

Long Name: VS-Aortic Proc-Aortic Annular Enlargement *SeqNo:* 4310
Short Name: **AnlrEnl** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether an annular enlargement procedure was performed on the Aortic Valve. An aortic annular enlargement is defined as incision of the aortic annulus to enlarge the aortic orifice. Annular enlargement techniques, include but are not limited to Manouguian, Konno and Nicks.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: VS-Aortic Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSAV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Resection of Sub-Aortic Stenosis *SeqNo:* 4311
Short Name: **ResectSubA** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether resection of sub-aortic tissue was performed alone or in conjunction with an aortic valve procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Aortic Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSAV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Aortic Proc-Imp-Type *SeqNo:* 4320
Short Name: **VSAoImTy** *Core:* No
Section Name: Valve Surgery *Harvest:* No
DBTableName: AdultData
Definition: Indicate the type of implant; choose one:
 None
 M = Mechanical
 B = Bioprosthesis
 H = Homograft
 A = Autograft (Ross)
 R = Ring/Annuloplasty
 BA = Band/Annuloplasty

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: VS-Aortic Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpAortic *DataLength:*
ParentValue: <> "No" And Is Not Missing *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|-------------------|
| 1 | None |
| 2 | Mechanical |
| 3 | Bioprosthesis |
| 4 | Homograft |
| 5 | Autograft (Ross) |
| 6 | Ring/Annuloplasty |
| 7 | Band/Annuloplasty |

Long Name: VS-Aortic Proc-Imp *SeqNo:* 4330
Short Name: **VSAoIm** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: VS-Aortic Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSAV *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VS-Aortic Proc-Imp-Size *SeqNo:* 4340
Short Name: **VSAoImSz** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Aortic implant size.

LowValue: 5 *UsualRangeLow:* 10 *ACCField:* Not mapped
HighValue: 50 *UsualRangeHigh:* 40 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Aortic Valve *Format:* Integer

ParentShortName: VSAV *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VS-Mitral Valve *SeqNo:* 4351
Short Name: **VSMV** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a mitral valve procedure was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Valve Procedure *SeqNo:* 4352
Short Name: **VSMVPr** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of procedure that was performed on the mitral valve.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSMV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Repair
2	Replacement

Long Name: VS-Mitral Valve Repair - Annuloplasty *SeqNo:* 4361
Short Name: **VSMitRAnnulo** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an annuloplasty.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Valve Repair - Leaflet Resection *SeqNo:* 4362
Short Name: **VSMitRLeafRes** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a leaflet resection.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Leaflet Resection Type *SeqNo:* 4380
Short Name: **VSLeafResTyp** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of leaflet resection.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Repair -
 Leaflet Resection *Format:* Text (categorical values
 specified by STS)

ParentShortName: VSMitRLeafRes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Triangular
2	Quadrangular
3	Other

Long Name: VS-Mitral Repair Location *SeqNo:* 4390
Short Name: **VSLeafRepLoc** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the repair involved the anterior, posterior, or both leaflets.

Commissural closure stitches do not make a bileaflet repair.

A commissurotomy IS a bileaflet repair.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Repair -
 Leaflet Resection *Format:* Text (categorical values
 specified by STS)

ParentShortName: VSMitRLeafRes *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Anterior
2	Posterior

3 Both Anterior and Posterior

Long Name: VS-Mitral Valve Repair - Sliding Plasty *SeqNo:* 4391
Short Name: **VSMitRSlidP** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a sliding plasty.

LowValue: *UsualRangeLow:* *ACCFfield:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: VS-Mitral Valve Repair - Annular Decalcification *SeqNo:* 4393
Short Name: **VSMitRADecalc** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an annular decalcification.

LowValue: *UsualRangeLow:* *ACCFfield:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: VS-Mitral Valve Repair - Neochords (PTFE) *SeqNo:* 4394
Short Name: **VSMitRPTFE** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included neochords (PTFE).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VS-Mitral Neochord Number *SeqNo:* 4400
Short Name: **VSNeoChNum** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of neochords inserted - 1 neochord is created from 1 double arm suture.

LowValue: 1 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 4 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Repair - Neochords (PTFE) *Format:* Integer

ParentShortName: VSMitRPTFE *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: VS-Mitral Valve Repair - Chordal / Leaflet Transfer *SeqNo:* 4401
Short Name: **VSMitRChord** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a chordal / leaflet transfer.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Valve Repair - Leaflet Extension / Replacement / Patch *SeqNo:* 4402
Short Name: **VSMitRLeafERP** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a leaflet extension / replacement / patch.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Valve Repair - Edge To Edge Repair *SeqNo:* 4403
Short Name: **VSMitREdge** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included an edge to edge repair.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Valve Repair - Mitral Commissurotomy *SeqNo:* 4404
Short Name: **VSMitRMitComm** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the mitral valve repair procedure included a mitral commissurotomy.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Repair" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Repair Attempt *SeqNo:* 4410
Short Name: **MitralIntent** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a Mitral Valve Repair was attempted prior to the Mitral Valve Replacement.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Mitral Valve Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: VSMVPr *DataLength:*

ParentValue: = "Replacement" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VS-Mitral Proc-Imp-Type *SeqNo:* 4420
Short Name: **VSMiImTy** *Core:* No
Section Name: Valve Surgery *Harvest:* No

DBTableName AdultData

Definition: Indicate the type of implant; choose one:
 None
 M = Mechanical
 B = Bioprosthesis
 H = Homograft
 A = Autograft (Ross)
 R = Ring/Annuloplasty
 BA = Band/Annuloplasty

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Mitral Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpMitral *DataLength:*

ParentValue: <> "No" And Is Not Missing *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	None

2	Mechanical
3	Bioprosthesis
4	Homograft
5	Autograft (Ross)
6	Ring/Annuloplasty
7	Band/Annuloplasty

Long Name: VS-Mitral Proc-Imp *SeqNo:* 4430
Short Name: **VSMiIm** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Mitral Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSMV *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VS-Mitral Proc-Imp-Size *SeqNo:* 4440
Short Name: **VSMiImSz** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Mitral implant size.

LowValue: 5 *UsualRangeLow:* 10 *ACCFIELD:* Not mapped
HighValue: 50 *UsualRangeHigh:* 40 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Mitral Valve *Format:* Integer

ParentShortName: VSMV *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VS-Mitral Chordal Preservation *SeqNo:* 4450
Short Name: **VSChorPres** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether native chords were preserved.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VS-Mitral Valve *Format:* Text (categorical values specified by STS)

ParentShortName: VSMV *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 None
- 2 Anterior
- 3 Posterior
- 4 Both

Long Name: VS-Tricuspid Proc-Procedure *SeqNo:* 4500
Short Name: **OpTricus** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done or not done on the Tricuspid Valve.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 No
- 2 Annuloplasty Only
- 3 Replacement
- 4 Reconstruction with

- Annuloplasty
- 5 Reconstruction without Annuloplasty
- 6 Valvectomy

Long Name: VS-Tricuspid Annuloplasty Type *SeqNo:* 4510

Short Name: **OpTricusAnTy** *Core:* Yes

Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate type of annuloplasty procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: VS-Tricuspid Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpTricus *DataLength:*

ParentValue: = "Annuloplasty Only" or "Reconstruction with Annuloplasty" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Pericardium
- 2 Suture
- 3 Prosthetic ring

Long Name: VS-Tricuspid Proc-Imp-Type *SeqNo:* 4530
Short Name: **VSTriImTy** *Core:* No
Section Name: Valve Surgery *Harvest:* No

DBTableName AdultData

Definition: Indicate the type of implant; choose one:
 None
 M = Mechanical
 B = Bioprosthesis
 H = Homograft
 A = Autograft (Ross)
 R = Ring/Annuloplasty
 BA = Band/Annuloplasty

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Tricuspid Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpTricus *DataLength:*

ParentValue: <> "No" And Is Not Missing *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|-------------------|
| 1 | None |
| 2 | Mechanical |
| 3 | Bioprosthesis |
| 4 | Homograft |
| 5 | Autograft (Ross) |
| 6 | Ring/Annuloplasty |
| 7 | Band/Annuloplasty |

Long Name: VS-Tricuspid Proc-Imp *SeqNo:* 4540
Short Name: **VSTrIm** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Tricuspid Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpTricus *DataLength:*

ParentValue: <> "No" And Is Not Missing *Data Source:* User

Long Name: VS-Tricuspid Proc-Imp-Size *SeqNo:* 4550
Short Name: **VSTrImSz** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Tricuspid implant size.

LowValue: 5 *UsualRangeLow:* 10 *ACCField:* Not mapped
HighValue: 50 *UsualRangeHigh:* 40 *ReportField:* No *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: VS-Tricuspid Proc-Procedure *Format:* Integer

ParentShortName: OpTricus *DataLength:*

ParentValue: <> "No" And Is Not Missing *Data Source:* User

Long Name: VS-Pulmonic Proc-Procedure *SeqNo:* 4560
Short Name: **OpPulm** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a surgical procedure was done or not done on the Pulmonic Valve.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Valve *Format:* Text (categorical values specified by STS)

ParentShortName: OpValve *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 No
- 2 Replacement
- 3 Reconstruction
- 4 Valvectomy

Long Name: VS-Pulmonic Proc-Imp-Type *SeqNo:* 4570
Short Name: **VSPuImTy** *Core:* No
Section Name: Valve Surgery *Harvest:* No

DBTableName AdultData

Definition: Indicate the type of implant; choose one:

- None
- M = Mechanical
- B = Bioprosthesis
- H = Homograft
- A = Autograft (Ross)
- R = Ring/Annuloplasty
- BA = Band/Annuloplasty

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Pulmonic Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpPulm *DataLength:*

ParentValue: <> "No" And Is Not Missing *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|-------------------|
| 1 | None |
| 2 | Mechanical |
| 3 | Bioprosthesis |
| 4 | Homograft |
| 5 | Autograft (Ross) |
| 6 | Ring/Annuloplasty |
| 7 | Band/Annuloplasty |

Long Name: VS-Pulmonic Proc-Imp *SeqNo:* 4580
Short Name: **VSPuIm** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the name of the prosthesis implanted. The names provided include the manufacturer's model number with "xx" substituting for the device size.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Pulmonic Proc-Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OpPulm *DataLength:*

ParentValue: <> "No" And Is Not Missing *Data Source:* User

Long Name: VS-Pulmonic Proc-Imp-Size *SeqNo:* 4590
Short Name: **VSPuImSz** *Core:* Yes
Section Name: Valve Surgery *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Pulmonic implant size.

LowValue: 5 *UsualRangeLow:* 10 *ACCField:* Not mapped
HighValue: 50 *UsualRangeHigh:* 40 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VS-Pulmonic Proc-Procedure *Format:* Integer

ParentShortName: OpPulm *DataLength:*

ParentValue: <> "No" And Is Not Missing *Data Source:* User

Long Name: Valve Implant List Version Number *SeqNo:* 4600
Short Name: **ValveVrsn** *Core:* No
Section Name: Valve Surgery *Harvest:* No
DBTableName AdultData
Definition: The version number of the list of valve implant options. The value is inserted into the record at the time the record is created. The version numbers will be specified by the STS.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: Valve *Format:* Text
ParentShortName: OpValve *DataLength:*
ParentValue: = "Yes" *Data Source:* Automatic

Long Name: IABP *SeqNo:* 4610
Short Name: **IABP** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the patient was placed on Intra-Aortic Balloon Pump (IABP).
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: IABP-When Inserted *SeqNo:* 4620
Short Name: **IABPWhen** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate when the IABP was inserted.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: Yes *PQRIField:* No

Parent Long Name: IABP *Format:* Text (categorical values specified by STS)

ParentShortName: IABP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Preop
2	Intraop
3	Postop

Long Name: IABP-Indication *SeqNo:* 4630
Short Name: **IABPInd** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the primary reason for inserting the IABP.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: IABP *Format:* Text (categorical values specified by STS)

ParentShortName: IABP *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Hemodyn Instability
2	PTCA Support
3	Unstable Angina
4	Cardiopulmonary Bypass (CPB) Weaning Failure

5 Prophylactic

Long Name: IABP-Removed Date *SeqNo:* 4640
Short Name: **IABPRemDt** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the date on which the IABP was removed.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: IABP *Format:* Date mm/dd/yyyy
ParentShortName: IABP *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Catheter Based Assist Device Used *SeqNo:* 4660
Short Name: **CathBasAssist** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the patient was placed on a catheter based assist device (e.g., Impella).
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Catheter Based Assist Device *SeqNo:* 4670
Short Name: **CathBasAssistDev** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the catheter based assist device that was used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Catheter Based Assist Device Used *Format:* Text (categorical values specified by STS)

ParentShortName: CathBasAssist *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Impella
2	Tandem Heart
9	Other

Long Name: Catheter Based Assist Device When Inserted *SeqNo:* 4690
Short Name: **CathBasAssistWhen** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate when the catheter based assist device was inserted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Catheter Based Assist Device Used *Format:* Text (categorical values specified by STS)

ParentShortName: CathBasAssist *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Preop
2	Intraop
3	Postop

Long Name: Catheter Based Assist Device Indication *SeqNo:* 4700
Short Name: **CathBasAssistInd** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the primary reason for inserting the device.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Catheter Based Assist Device Used *Format:* Text (categorical values specified by STS)

ParentShortName: CathBasAssist *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Hemodynamic Instability
2	Cardiopulmonary Bypass (CPB) weaning failure
3	PCI Failure
4	Other

Long Name: Catheter Based Assist Device Removed Date *SeqNo:* 4710
Short Name: **CathBasAssistRemDt** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date on which the catheter based assist device was removed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Catheter Based Assist Device Used *Format:* Date mm/dd/yyyy

ParentShortName: CathBasAssist *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Extracorporeal Membrane Oxygenation *SeqNo:* 4730
Short Name: **ECMO** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was placed on ECMO.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: ECMO When Initiated *SeqNo:* 4740
Short Name: **ECMOWhen** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate when patient was placed on ECMO.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Extracorporeal Membrane Oxygenation *Format:* Text (categorical values specified by STS)

ParentShortName: ECMO *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Preop

2 Intraop

3 Postop

4 Non-operative

Long Name: ECMO Indication *SeqNo:* 4750
Short Name: **ECMOInd** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate clinical indication for placing patient on ECMO.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Extracorporeal Membrane Oxygenation *Format:* Text (categorical values specified by STS)

ParentShortName: ECMO *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Cardiac Failure
2	Respiratory Failure
3	Hypothermia
4	Rescue/salvage

Long Name: VAD-Previous VAD *SeqNo:* 4760
Short Name: **PrevVAD** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if at the time of this procedure, the patient has a VAD in place that was inserted during a previous admission or from an outside hospital.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Previous VAD Facility *SeqNo:* 4770
Short Name: **PrevVADF** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the previously implanted assist device was implanted at another facility.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Previous VAD *Format:* Text (categorical values specified by STS)

ParentShortName: PrevVAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Previous VAD Insertion Date *SeqNo:* 4771
Short Name: **PrevVADD** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate insertion date of previous VAD.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VAD-Previous VAD *Format:* Date mm/dd/yyyy

ParentShortName: PrevVAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Previous VAD Indication *SeqNo:* 4772
Short Name: **PrevVADIn** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Specify indication for VAD insertion.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VAD-Previous VAD *Format:* Text (categorical values specified by STS)
ParentShortName: PrevVAD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Bridge to Transplantation	Includes those patients who are supported with a VAD until a heart transplant is possible.
2	Bridge to Recovery	Includes those patients who are expected to have ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant reperfusion injury).
3	Destination	Includes those patients where a heart transplant is not an option. The VAD is placed for permanent life sustaining support.
4	Post Cardiotomy Ventricular Failure	Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.
5	Device Malfunction	Includes those patients who are currently VAD supported and are experiencing device failure.
6	End of Life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: Previous VAD Type *SeqNo:* 4773
Short Name: **PrevVADTy** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Indicate type of VAD previously inserted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VAD-Previous VAD *Format:* Text (categorical values specified by STS)
ParentShortName: PrevVAD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	RVAD	Right Ventricular Assist Device
2	LVAD	Left Ventricular Assist Device
3	BiVAD	BiVentricular Assist Device
4	TAH	Total Artificial Heart

Long Name: Previous VAD Device *SeqNo:* 4774
Short Name: **PrevVADDevice** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Indicate Previous VAD device.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: VAD-Previous VAD *Format:* Text (categorical values specified by STS)
ParentShortName: PrevVAD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

<i>Long Name:</i>	VAD Product Type List Version Number	<i>SeqNo:</i>	4780
<i>Short Name:</i>	VADListVrsn	<i>Core:</i>	No
<i>Section Name:</i>	Mechanical Cardiac Assist Devices	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	The version number of the list of options available for the VAD product type fields. The value is inserted into the record at the time the record is created. The version numbers will be specified by the STS.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	No
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>		<i>Format:</i>	Text
<i>ParentShortName:</i>		<i>DataLength:</i>	
<i>ParentValue:</i>		<i>Data Source:</i>	Automatic

<i>Long Name:</i>	VAD-Indication for this VAD	<i>SeqNo:</i>	4790
<i>Short Name:</i>	VADInd	<i>Core:</i>	Yes
<i>Section Name:</i>	Mechanical Cardiac Assist Devices	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate the reason for implanting a Ventricular Assist Device (VAD) during this procedure.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	No
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	VAD Implanted or Removed	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	VADProc	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes, implanted" or "Yes, implanted and explanted"	<i>Data Source:</i>	User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Bridge to Transplantation	Includes those patients who are supported with a VAD until a heart transplant is possible.
2	Bridge to Recovery	Includes those patients who are expected to have ventricular recovery. (i.e. Myocarditis patients, postcardiotomy syndromes, viral cardiomyopathies, AMI w/ revascularization, and post-transplant reperfusion injury).
3	Destination	Includes those patients where a heart transplant is not an option. The VAD is placed for permanent life sustaining support.

- 4 Postcardiotomy Ventricular Failure (separation from CPB) Includes those postcardiotomy patients who receive a VAD because of failure to separate from the heart-lung machine. Postcardiotomy refers to those patients with the inability to wean from cardiopulmonary bypass secondary to left, right, or biventricular failure.
- 5 Device Malfunction Includes those patients who are currently VAD supported and are experiencing device failure.
- 6 End of Life Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Intubated Pre-VAD *SeqNo:* 4800

Short Name: **IntPVAD** *Core:* No

Section Name: Mechanical Cardiac Assist Devices *Harvest:* No

DBTableName AdultData

Definition: Indicate if the patient was intubated prior to the OR in which the VAD was placed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: VAD *Format:* Text (categorical values specified by STS)

ParentShortName: VAD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VAD-Hemodynamics Pre-VAD-PCWP *SeqNo:* 4810
Short Name: **HPVPCWP** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData
Definition: Indicate the Pulmonary Capillary Wedge Pressure (PCWP) in mm/Hg as determined prior to induction in the OR, or in an ICU immediately prior to the OR.
LowValue: 1 *UsualRangeLow:* 5 *ACCField:* Not mapped
HighValue: 50 *UsualRangeHigh:* 30 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD *Format:* Integer
ParentShortName: VAD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Hemodynamics Pre-VAD-CVP *SeqNo:* 4820
Short Name: **HPVCVP** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData
Definition: Indicate the Central Venous Pressure (CVP) in mm/Hg prior to induction in the OR, or in an ICU immediately prior to the OR.
LowValue: 1 *UsualRangeLow:* 5 *ACCField:* Not mapped
HighValue: 50 *UsualRangeHigh:* 10 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD *Format:* Integer
ParentShortName: VAD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Hemodynamics Pre-VAD-CI *SeqNo:* 4830
Short Name: **HPVCI** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName: AdultData
Definition: Indicate the Cardiac Index (CI) in L/(min x m2) prior to induction in the OR, or in an ICU immediately prior to the OR.
LowValue: 0.5 *UsualRangeLow:* 0.5 *ACCField:* Not mapped
HighValue: 5.0 *UsualRangeHigh:* 2.0 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD *Format:* Real
ParentShortName: VAD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Hemodynamics Pre-VAD-RVEF *SeqNo:* 4840
Short Name: **HPVRVEF** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName: AdultData
Definition: Indicate the Right Ventricular Function prior to anesthesia induction in the OR and as close to time of the VAD implant as possible.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD *Format:* Text (categorical values specified by STS)
ParentShortName: VAD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Normal
- 2 Mildly Impaired
- 3 Moderately Impaired
- 4 Severely Impaired

Long Name: VAD-Implant Type *SeqNo:* 4850
Short Name: **VImpTy** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the first type of VAD implanted during this hospitalization.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted" or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 RVAD - Right Ventricular Assist Device
- 2 LVAD - Left Ventricular Assist Device
- 3 BiVAD - BiVentricular Assist Device
- 4 TAH - Total Artificial Heart

Long Name: VAD-Initial VAD Cannulation/Attach Site - LVAD Inflow *SeqNo:* 4860
Short Name: **LVADInf** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant Type *Format:* Text (categorical values specified by STS)
ParentShortName: VImpTy *DataLength:*
ParentValue: = "LVAD", "BiVAD", or "TAH" *Data Source:* User

Harvest Codes:
Code: Value:
 1 Left Atrium
 2 Left Ventricle

Long Name: VAD-Initial VAD Cannulation/Attach Site - RVAD Inflow *SeqNo:* 4870
Short Name: **RVADInf** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV). The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant Type *Format:* Text (categorical values specified by STS)
ParentShortName: VImpTy *DataLength:*
ParentValue: = "RVAD", "BiVAD" or "TAH" *Data Source:* User

Harvest Codes:
Code: Value:
 1 Right Atrium

2 Right Ventricle

Long Name: VAD-Device *SeqNo:* 4880
Short Name: **VProdTy** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the VAD brand name implanted. Implant defined as physical placement of the VAD.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant Type *Format:* Text (categorical values specified by STS)
ParentShortName: VImpTy *DataLength:*
ParentValue: Is Not Missing *Data Source:* User

Long Name: VAD-Implant Date *SeqNo:* 4890
Short Name: **VImpDt** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the date the VAD was implanted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant Type *Format:* Date mm/dd/yyyy
ParentShortName: VImpTy *DataLength:*
ParentValue: Is Not Missing *Data Source:* User

Long Name: VAD-Explant *SeqNo:* 4900
Short Name: **VExp** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the VAD was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant Type *Format:* Text (categorical values specified by STS)

ParentShortName: VImpTy *DataLength:*

ParentValue: Is Not Missing *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Explant Date *SeqNo:* 4910
Short Name: **VExpDt** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the VAD was explanted.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant *Format:* Date mm/dd/yyyy

ParentShortName: VExp *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Explant Reason *SeqNo:* 4920
Short Name: **VExpRsn** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the reason the VAD was explanted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Explant *Format:* Text (categorical values specified by STS)
ParentShortName: VExp *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.
5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.
6	End of Life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Cardiac Transplant Date *SeqNo:* 4930
Short Name: **VTxDt** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant Reason *Format:* Date mm/dd/yyyy

ParentShortName: VExpRsn *DataLength:*

ParentValue: = "Cardiac Transplant" *Data Source:* User

Long Name: VAD-Implant #2 *SeqNo:* 4940
Short Name: **VImp2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a second ventricular assist device was implanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted" or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VAD-Implant Type #2 *SeqNo:* 4950
Short Name: **VImpTy2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the second type of ventricular assist device implanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 RVAD - Right Ventricular Assist Device
- 2 LVAD - Left Ventricular Assist Device
- 3 BiVAD - BiVentricular Assist Device
- 4 TAH - Total Artificial Heart

Long Name: VAD- #2 VAD Cannulation/Attach Site - LVAD Inflow *SeqNo:* 4960
Short Name: **LVADinf2** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData
Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant Type #2 *Format:* Text (categorical values specified by STS)
ParentShortName: VImpTy2 *DataLength:*
ParentValue: = "LVAD", "BiVAD", or "TAH" *Data Source:* User
 Harvest Codes:
 Code: Value:
 1 Left Atrium
 2 Left Ventricle

Long Name: VAD- #2 VAD Cannulation/Attach Site - RVAD Inflow *SeqNo:* 4970
Short Name: **RVADinf2** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData
Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV). The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant Type #2 *Format:* Text (categorical values specified by STS)
ParentShortName: VImpTy2 *DataLength:*
ParentValue: = "RVAD", "BiVAD" or "TAH" *Data Source:* User
 Harvest Codes:
 Code: Value:
 1 Right Atrium

2 Right Ventricle

Long Name: VAD-Device #2 *SeqNo:* 4980
Short Name: **VProdTy2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the specific product #2 implanted. Implant defined as physical placement of the VAD.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)
ParentShortName: VImp2 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Implant Date #2 *SeqNo:* 4990
Short Name: **VImpDt2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the date the VAD #2 was implanted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant #2 *Format:* Date mm/dd/yyyy
ParentShortName: VImp2 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Explant #2 *SeqNo:* 5000
Short Name: **VExp2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the VAD #2 was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Explant Date #2 *SeqNo:* 5010
Short Name: **VExpDt2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the VAD #2 was explanted.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant #2 *Format:* Date mm/dd/yyyy

ParentShortName: VExp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Explant Reason #2 *SeqNo:* 5020
Short Name: **VExpRsn2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the reason the VAD #2 was explanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VExp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.
5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.
6	End of Life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Cardiac Transplant Date #2 *SeqNo:* 5030
Short Name: **VTxDt2** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant Reason #2 *Format:* Date mm/dd/yyyy

ParentShortName: VExpRsn2 *DataLength:*

ParentValue: = "Cardiac Transplant" *Data Source:* User

Long Name: VAD-Implant #3 *SeqNo:* 5040
Short Name: **VImp3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a third ventricular assist device was implanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant #2 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp2 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VAD-Implant Type #3 *SeqNo:* 5050
Short Name: **VImpTy3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the third type of ventricular assist device implanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 RVAD - Right Ventricular Assist Device
- 2 LVAD - Left Ventricular Assist Device
- 3 BiVAD - BiVentricular Assist Device
- 4 TAH - Total Artificial Heart

Long Name: VAD- #3 VAD Cannulation/Attach Site - LVAD Inflow *SeqNo:* 5060
Short Name: **LVADInf3** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData

Definition: Indicate the location of the LVAD inflow site as the left atrium (LA) or the left ventricle (LV). The LVAD inflow is defined as the anatomic location (left atrium or left ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant Type #3 *Format:* Text (categorical values specified by STS)
ParentShortName: VImpTy3 *DataLength:*
ParentValue: = "LVAD", "BiVAD", or "TAH" *Data Source:* User

Harvest Codes:
Code: Value:
 1 Left Atrium
 2 Left Ventricle

Long Name: VAD- #3 VAD Cannulation/Attach Site - RVAD Inflow *SeqNo:* 5070
Short Name: **RVADInf3** *Core:* No
Section Name: Mechanical Cardiac Assist Devices *Harvest:* No
DBTableName AdultData

Definition: Indicate the location of the RVAD inflow site as the right atrium (RA) or the right ventricle (RV). The RVAD inflow is defined as the anatomic location (right atrium or right ventricle) for the VAD cannula or conduit that provides the flow of blood from the heart to the VAD pump.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant Type #3 *Format:* Text (categorical values specified by STS)
ParentShortName: VImpTy3 *DataLength:*
ParentValue: = "RVAD", "BiVAD" or "TAH" *Data Source:* User

Harvest Codes:
Code: Value:
 1 Right Atrium

2 Right Ventricle

Long Name: VAD-Device #3 *SeqNo:* 5080
Short Name: **VProdTy3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the specific product #3 implanted. Implant defined as physical placement of the VAD.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant #3 *Format:* Text (categorical values specified by STS)
ParentShortName: VImp3 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Implant Date #3 *SeqNo:* 5090
Short Name: **VImpDt3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes
DBTableName: AdultData
Definition: Indicate the date the VAD #3 was implanted.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: VAD-Implant #3 *Format:* Date mm/dd/yyyy
ParentShortName: VImp3 *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Explant #3 *SeqNo:* 5100
Short Name: **VExp3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the VAD #3 was explanted. Explant is defined as physical removal of the VAD.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Implant #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VImp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Explant Date #3 *SeqNo:* 5110
Short Name: **VExpDt3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the VAD #3 was explanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant #3 *Format:* Date mm/dd/yyyy

ParentShortName: VExp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: VAD-Explant Reason #3 *SeqNo:* 5120
Short Name: **VExpRsn3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the reason the VAD #3 was explanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant #3 *Format:* Text (categorical values specified by STS)

ParentShortName: VExp3 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Cardiac Transplant	The VAD was explanted for Cardiac Transplant.
2	Recovery	The VAD was removed after cardiac recovery.
3	Device Transfer	The VAD was explanted in order to implant another assist device.
4	Device-Related Infection	An infection within the pump pocket, driveline, VAD Endocarditis, or other infection requiring explantation of the VAD. The body of the VAD has an active infection requiring removal to eliminate the infection. "Device-related infections" are defined as positive culture in the presence of leukocytosis, and /or fever requiring medical or surgical intervention.
5	Device Malfunction	The VAD pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.
6	End of Life	Mechanical device pump has reached functional life expectancy and requires replacement.

Long Name: VAD-Cardiac Transplant Date #3 *SeqNo:* 5130
Short Name: **VTxDt3** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the patient received a cardiac transplant.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD-Explant Reason #3 *Format:* Date mm/dd/yyyy

ParentShortName: VExpRsn3 *DataLength:*

ParentValue: = "Cardiac Transplant" *Data Source:* User

Long Name: VAD-Primary VAD Comp-Intracranial Bleed *SeqNo:* 5140
Short Name: **PVCmpBld** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient had an intracranial bleed, confirmed by CT scan or other diagnostic studies.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-Embolic Stroke *SeqNo:* 5150
Short Name: **PVCmpESt** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient had embolic stroke caused by a blood clot, air embolus, or tissue, confirmed by CT scan or other diagnostic studies.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Primary VAD Comp-Driveline and/or cannula Infection *SeqNo:* 5160
Short Name: **PVCmpDCI** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient had a driveline and/or cannula infection. Driveline and/or cannula infection is defined as the presence of erythema, drainage, or purulence at the VAD connection site whether entering or exiting the body in association with leukocytosis and in the presence of positive culture.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: VAD-Primary VAD Comp-Pump Pocket Infection *SeqNo:* 5170
Short Name: **PVCmpPPI** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient had a pump pocket infection. A pump pocket infection is defined as a persistent drainage in the physical location of the pump, located preperitoneally or intra-abdominally with positive cultures from the pocket site.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*
ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VAD-Primary VAD Comp-VAD Endocarditis *SeqNo:* 5180
Short Name: **PVCmpEnd** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient had VAD endocarditis. VAD endocarditis is defined as an infection of the blood contacting surface of the VAD device itself. This may include:

- internal surfaces;
- graft material;
- inflow/outflow valves of the VAD.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted"
Data Source: User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: VAD-Primary VAD Comp-Device Malfunction *SeqNo:* 5190
Short Name: **PVCmpMal** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the pump itself is not functioning properly causing hemodynamic compromise, and/or requiring immediate intervention or VAD replacement.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: VAD-Primary VAD Comp-Hemolysis *SeqNo:* 5191
Short Name: **PVCmpHem** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient experienced clinical signs of hemolysis (anemia, low hematocrit, hyperbilirubinemia) and a plasma free hemoglobin > 40 mg/dl within 72 hours of VAD implant.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: VAD-Primary VAD Comp-Bowel Obstruction *SeqNo:* 5200
Short Name: **PVCmpBO** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient was diagnosed with a bowel obstruction post VAD insertion by documentation in the medical record.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: VAD-Discharge Status *SeqNo:* 5210
Short Name: **VADDiscS** *Core:* Yes
Section Name: Mechanical Cardiac Assist Devices *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the VAD status at discharge from the hospital.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: VAD Implanted or Removed *Format:* Text (categorical values specified by STS)

ParentShortName: VADProc *DataLength:*

ParentValue: = "Yes, implanted", "Yes, explanted", or "Yes, implanted and explanted" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	With VAD

- 2 Without VAD
- 3 Expired in Hospital

Long Name: Other Card-LVA *SeqNo:* 5220
Short Name: **OCarLVA** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Left Ventricular Aneurysm Repair either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Other Card-VSD *SeqNo:* 5230
Short Name: **OCarVSD** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Ventricular Septal Defect Repair either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Other Card-ASD *SeqNo:* 5240
Short Name: **OCarASD** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had an Atrial Septal Defect Repair either in conjunction with, or as the primary surgical procedure including but not limited to ASD, Secundum; ASD, Sinus venosus; and PFO.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Other Card-ASD-Type *SeqNo:* 5241
Short Name: **OCarASDTy** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the type of Atrial Septal Defect.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-ASD *Format:* Text (categorical values specified by STS)

ParentShortName: OCarASD *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

- | <u>Code:</u> | <u>Value:</u> | <u>Definition:</u> |
|--------------|---------------|--|
| 1 | Secundum | An ASD confined to the region of the fossa ovalis; its most common etiology is a deficiency of the septum primum, but deficiency of the limbus or septum secundum may also contribute. |
| 2 | Sinus Venosus | An ASD with a vena cava or pulmonary vein (or veins) |

3 PFO

that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the true atrial septum.

Small interatrial communication in the region of the foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency of the septum secundum.

<i>Long Name:</i>	Other Card-Batista	<i>SeqNo:</i>	5280
<i>Short Name:</i>	OCarBati	<i>Core:</i>	No
<i>Section Name:</i>	Other Cardiac Procedures	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether the patient had a Left Ventricular Reduction Myoplasty either in conjunction with, or as the primary surgical procedure. Left Ventricular Reduction Myoplasty is a procedure whereby left ventricular myocardium is excised to reduce left ventricular volume in patients with a dilated cardiomyopathy, with or without mitral valve replacement or repair. If a concomitant valve procedure is performed, please check that category also.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCFIELD:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	Yes
<i>Parent Long Name:</i>	Other Card	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	OpOCard	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
<i>Harvest Codes:</i>			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	

Long Name: Other Card-Surgical Ventricular Restoration *SeqNo:* 5290
Short Name: **OCarSVR** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Surgical Ventricular Restoration either in conjunction with, or as the primary surgical procedure. Surgical Ventricular Restoration are procedures that restore the geometry of the heart after an anterior MI. They include the Dor procedure or the SAVER procedure. This SVR procedure is distinct from an anterior left ventricular aneurysmectomy (LVA) and from a Batista procedure (left ventricular volume reduction procedure).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Congenital *SeqNo:* 5300
Short Name: **OCarCong** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a congenital defect repair either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Congenital Diagnosis 1 *SeqNo:* 5310
Short Name: **OCarCongDiag1** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the first of the three most significant congenital diagnoses.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Other Card-Congenital *Format:* Text (categorical values specified by STS)
ParentShortName: OCarCong *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
10	PFO	Small interatrial communication in the region of the foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency of the septum secundum.
20	ASD, Secundum	An ASD confined to the region of the fossa ovalis; its most common etiology is a deficiency of the septum primum, but deficiency of the limbus or septum secundum may also contribute.
30	ASD, Sinus venosus	Indicate if the patient has the diagnosis of "ASD, Sinus venosus". An "ASD, Sinus venosus" is defined as a defect with a vena cava or pulmonary vein (or veins) that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the true atrial septum.
40	ASD, Coronary sinus	Deficiency of the wall (sinus septum) separating the left atrium from the coronary sinus, often allowing blood to shunt from the left atrium to the right atrium via the coronary sinus ostium. May or may not be associated with a persistent left superior vena cava.
50	ASD, Common atrium (single atrium)	Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.
71	VSD, Type 1 (Subarterial)	A VSD that lies beneath the semilunar valve(s) in the

	(Supracristal) (Conal septal defect) (Infundibular)	conal or outlet septum.
73	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.
75	VSD, Type 3 (Inlet) (AV canal type)	A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.
77	VSD, Type 4 (Muscular)	A VSD completely surrounded by muscle.
79	VSD, Type: Gerbode type (LV-RA communication)	A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.
80	VSD, Multiple	More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.
100	AVC (AVSD), Complete (CAVSD)	Indicate if the patient has the diagnosis of “AVC (AVSD), Complete (CAVSD)”. An “AVC (AVSD), Complete (CAVSD)” is a “complete atrioventricular canal” or a “complete atrioventricular septal defect” and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An “AVC (AVSD), Complete (CAVSD)” is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which

- floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.
- 110 AVC (AVSD), Intermediate (transitional) An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.
- 120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum) An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.
- 140 AP window (aortopulmonary window) Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)
- 150 Pulmonary artery origin from ascending aorta (hemitruncus) One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.

- 160 Truncus arteriosus
Indicate if the patient has the diagnosis of “Truncus arteriosus”. A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.
- 170 Truncal valve insufficiency
Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).
- 2010 Truncus arteriosus +
Interrupted aortic arch
Indicate if the patient has the diagnosis of “Truncus arteriosus + Interrupted aortic arch”. {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}
- 180 Partial anomalous pulmonary
venous connection (PAPVC)
Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).

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| 190 | Partial anomalous pulmonary venous connection (PAPVC), scimitar | The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches. |
| 200 | Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac) | All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed. |
| 210 | Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac) | All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed. |
| 220 | Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac) | All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed. |
| 230 | Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed) | All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed. |
| 250 | Cor triatriatum | In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supervalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supervalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor |

- atriatrium dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
- 260 Pulmonary venous stenosis Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).
- 270 Systemic venous anomaly Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.
- 280 Systemic venous obstruction Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatrium dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
- 290 TOF Indicate if the patient has the diagnosis of “TOF”. Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). “TOF, Pulmonary stenosis”, (2). “TOF, AVC (AVSD)”, (3). “TOF, Absent pulmonary valve”, (4). “Pulmonary atresia, VSD (Including TOF, PA)”, or (5). “Pulmonary atresia, VSD-MAPCA (pseudotruncus)”. {“TOF” is “Tetralogy of Fallot” and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the

aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.} (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as “VSD, Type 4 (Muscular)”. Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")

2140 TOF, Pulmonary stenosis

Indicate if the patient has the diagnosis of “TOF, Pulmonary stenosis”. Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as “VSD, Type 4 (Muscular)”. Pulmonary arteries may be diminutive or

- there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}
- 300 TOF, AVC (AVSD) TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.
- 310 TOF, Absent pulmonary valve Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is "Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semi-lunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilatation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with

- pulmonary valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilatation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)
- 320 Pulmonary atresia
Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.
- 330 Pulmonary atresia, IVS
Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.
- 340 Pulmonary atresia, VSD
(Including TOF, PA)
Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code

- should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.
- 350 Pulmonary atresia, VSD-MAPCA (pseudotruncus) MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.
- 360 MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD) Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.
- 370 Ebstein's anomaly Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilatation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases

		of Ebstein's anomaly with pulmonary atresia should be coded with a Primary Diagnosis of "Ebstein's anomaly", and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)
380	Tricuspid regurgitation, non-Ebstein's related	Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).
390	Tricuspid stenosis	Tricuspid stenosis may be due to congenital factors (valvular hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).
400	Tricuspid regurgitation and tricuspid stenosis	Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.
410	Tricuspid valve, Other	Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.
420	Pulmonary stenosis, Valvar	Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.
430	Pulmonary artery stenosis (hypoplasia), Main (trunk)	Indicate if the patient has the diagnosis of "Pulmonary artery stenosis (hypoplasia), Main (trunk)". "Pulmonary artery stenosis (hypoplasia), Main (trunk)" is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated

		or associated with other cardiac lesions. Since the narrowing is distal to the pulmonic valve, it may also be known as supra-valvar pulmonary stenosis.
440	Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)	Indicate if the patient has the diagnosis of “Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)”. “Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)” is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
450	Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)	Indicate if the patient has the diagnosis of “Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)”. “Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)” is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
470	Pulmonary artery, Discontinuous	Indicate if the patient has the diagnosis of “Pulmonary artery, Discontinuous”. Pulmonary artery, Discontinuous” is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
490	Pulmonary stenosis, Subvalvar	Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.
500	DCRV	The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.
510	Pulmonary valve, Other	Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
530	Pulmonary insufficiency	Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired

		(for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).
540	Pulmonary insufficiency and pulmonary stenosis	Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supralvalvar stenosis.
2130	Shunt failure	Indicate if the patient has the diagnosis of “Shunt failure”. This diagnostic subgroup includes failure of any of a variety of shunts (“Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)”, “Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)”, “Shunt, Systemic to pulmonary, Other”, and “Sano Shunt”), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis (“Shunt failure”) would be the primary diagnosis in a patient with, for example, “Hypoplastic left heart syndrome (HLHS)” who underwent a “Norwood procedure” with a “Modified Blalock-Taussig Shunt” and now requires reoperation for thrombosis of the “Modified Blalock-Taussig Shunt”. The underlying or fundamental diagnosis in this patient is “Hypoplastic left heart syndrome (HLHS)”, but the primary diagnosis for the operation to be performed to treat the thrombosis of the “Modified Blalock-Taussig Shunt” would be “Shunt failure”. Please note that the choice “2130 Shunt failure” does not include “520 Conduit failure”.
520	Conduit failure	Indicate if the patient has the diagnosis of “Conduit failure”. This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis (“Conduit failure”) would be the primary diagnosis in a patient with, for example, “Truncus arteriosus” repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is “Truncus arteriosus”, but the primary diagnosis for the operation to be performed during the hospitalization (in this case, “Conduit reoperation”) would be “Conduit failure”. Please note that the choice “520 Conduit failure” does not include “2130 Shunt failure”.
550	Aortic stenosis, Subvalvar	Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral

valve tissue, abnormal insertion of the mitral anterior leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supralvalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also known as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.

560 Aortic stenosis, Valvar

Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.

570 Aortic stenosis, Supralvalvar

Congenital supralvalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure

- to thrive, and occasionally infantile hypercalcemia. Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.
- 590 Aortic valve atresia
- Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.
- 600 Aortic insufficiency
- Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supravalvar or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neo-aorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annulo-aortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be

		<p>coded first as either conduit failure or prosthetic valve failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.</p>
610	Aortic insufficiency and aortic stenosis	<p>Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.</p>
620	Aortic valve, Other	<p>This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (normal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.</p>
630	Sinus of Valsalva aneurysm	<p>The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.</p>
640	LV to aorta tunnel	<p>The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity</p>

- of a valve) communication between the aorta and left ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.
- 650 Mitral stenosis, Supravalvar mitral ring
Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
- 660 Mitral stenosis, Valvar
Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or

		regurgitation and stenosis) should be listed as the primary defect.
670	Mitral stenosis, Subvalvar	Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
680	Mitral stenosis, Subvalvar, Parachute	In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilatation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supra-annular mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
695	Mitral stenosis	Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.
700	Mitral regurgitation and mitral stenosis	Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
710	Mitral regurgitation	Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilatation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae

		tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
720	Mitral valve, Other	Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.
730	Hypoplastic left heart syndrome (HLHS)	Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.
2080	Shone's syndrome	Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supralvalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of "parachute mitral valve", supralvalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. <i>Am J Cardiol</i> 1963; 11: 714–725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. <i>Cardiology in the Young</i> , 2006; 16(4): 339–368, August 2006.

Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however,

		the term “2080 Shone’s syndrome” may not be the “Primary Diagnosis” of an operation. The term “2080 Shone’s syndrome” may be a “Secondary Diagnosis” of an operation.
740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be divided into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilatation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3) spongiform cardiomyopathy.
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	Single morphologically left ventricle (smooth internal walls, lack chordal attachments of AV valves to the rudimentary septal surface) that receives both atrioventricular valves.
800	Single ventricle, DIRV	Single morphologically right ventricle (more heavily trabeculated, generally have chordal attachments of AV valve to the septal surfaces) that receives both

- atrioventricular valves.
- 810 Single ventricle, Mitral atresia Single ventricle anomalies with mitral atresia. May also be associated with double outlet right ventricle, congenitally corrected transposition, pulmonary atresia, or pulmonary stenosis.
- 820 Single ventricle, Tricuspid atresia Single ventricle anomalies with tricuspid atresia. May also be associated with complete transposition of the great arteries, congenitally corrected transposition of the great arteries, pulmonary atresia, pulmonary stenosis, subaortic stenosis, or ventricular septal defect (small or large).
- 830 Single ventricle, Unbalanced AV canal Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)-type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)-type or RV-dominant AV septal defect.
- 840 Single ventricle, Heterotaxia syndrome Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome. Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or

- normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome.
- 850 Single ventricle, Other
If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.
- 851 Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)
Indicate if the patient has the diagnosis of “Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)”. In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code “Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)”, and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {“Total anomalous pulmonary venous connection (TAPVC)” is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.} {The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term “single ventricle” as synonymous for the “functionally univentricular heart”. (The functionally univentricular heart is defined as a spectrum of cardiac

malformations in which entire ventricular mass is functionally univentricular; in other words, whenever only one ventricle is capable, for whatever reason, of supporting either the systemic or the pulmonary circulation.) The consensus of the EACTS and STS Congenital Heart Surgery Database Committees is that the nomenclature proposal for single ventricle hearts would encompass hearts with double inlet atrioventricular connection (both double inlet left ventricle [DILV] and double inlet right ventricle [DIRV]), hearts with absence of one atrioventricular connection (mitral atresia and tricuspid atresia), hearts with a common atrioventricular valve and only one completely well-developed ventricle (unbalanced common atrioventricular canal defect), hearts with only one fully well-developed ventricle and heterotaxia syndrome (single ventricle heterotaxia syndrome), and finally other rare forms of univentricular hearts that do not fit in one of the specified major categories. In the version of the IPCCC derived from the nomenclature of the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and the STS, patients classified in this section of the nomenclature, therefore, include all those who would be coded using the Short List for “Single Ventricle”, specifically: (1) Single ventricle; (2) Single ventricle, DILV; (3) Single ventricle, DIRV; (4) Single ventricle, Heterotaxia syndrome; (5) Single ventricle, Mitral atresia; (6) Single ventricle, Tricuspid atresia; (7) Single ventricle, Unbalanced AV canal. (Despite the recognition that hypoplastic left heart syndrome is a common form of functionally univentricular heart, with a single or dominant ventricle of right ventricular morphology, the EACTS-STS version of the IPCCC includes an entirely separate section for consideration of hypoplastic left heart syndrome. Also, it is recognized that a considerable variety of other structural cardiac malformations, such as pulmonary atresia with intact ventricular septum, biventricular hearts with straddling atrioventricular valves, and some complex forms of double outlet right ventricle (DORV), may at times be best managed in a fashion similar to that which is used to treat other functionally univentricular hearts. Nomenclature for description of those entities, however, is not included in this Single Ventricle section of the EACTS-STS version of the IPCCC.)} [1] [1]. Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally

- Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16, Supplement 1: 9 – 21, February 2006.
- 870 Congenitally corrected TGA Indicate if the patient has the diagnosis of “Congenitally corrected TGA”. Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.
- 872 Congenitally corrected TGA, IVS Indicate if the patient has the diagnosis of “Congenitally corrected TGA, IVS”. “Congenitally corrected TGA, IVS” is “Congenitally corrected transposition with an intact ventricular septum”, in other words, “Congenitally corrected transposition with no VSD”. (Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)

- 874 Congenitally corrected TGA, IVS-LVOTO Indicate if the patient has the diagnosis of “Congenitally corrected TGA, IVS-LVOTO”. “Congenitally corrected TGA, IVS-LVOTO” is “Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction”, in other words, “Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD”. (Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)
- 876 Congenitally corrected TGA, VSD Indicate if the patient has the diagnosis of “Congenitally corrected TGA, VSD”. “Congenitally corrected TGA, VSD” is “Congenitally corrected transposition with a VSD”. (Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)
- 878 Congenitally corrected TGA, Indicate if the patient has the diagnosis of “Congenitally

VSD-LVOTO

corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)

880 TGA, IVS

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

890 TGA, IVS-LVOTO

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

900 TGA, VSD

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial

- discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 910 TGA, VSD-LVOTO
- A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 930 DORV, VSD type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 940 DORV, TOF type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV,

- there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.
- 950 DORV, TGA type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 960 DORV, Remote VSD (uncommitted VSD)
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 2030 DORV + AVSD (AV Canal)
- Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional

- (secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.
- 975 DORV, IVS Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 980 DOLV Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 990 Coarctation of aorta Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.
- 1000 Aortic arch hypoplasia Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and

- 50%, respectively, of the diameter of the ascending aorta.
- 92 VSD + Aortic arch hypoplasia A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)
- 94 VSD + Coarctation of aorta Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}
- 1010 Coronary artery anomaly, Anomalous aortic origin of coronary artery from aorta (AAOCA) Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.
- 1020 Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA) In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.
- 1030 Coronary artery anomaly, Fistula The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin,

		and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.
1040	Coronary artery anomaly, Aneurysm	Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.
1050	Coronary artery anomaly, Other	Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).
1070	Interrupted aortic arch	Indicate if the patient has the diagnosis of “Interrupted aortic arch”. Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.
2020	Interrupted aortic arch + VSD	Indicate if the patient has the diagnosis of “Interrupted aortic arch + VSD”. In the event of interrupted aortic arch occurring in association with VSD, code “Interrupted aortic arch + VSD”, and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by

- site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}
- 2000 Interrupted aortic arch + AP window (aortopulmonary window)
- Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window

- involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code “Interrupted aortic arch + AP window (aortopulmonary window)”, and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.}}
- 1080 Patent ductus arteriosus
- Indicate if the patient has the diagnosis of “Patent ductus arteriosus”. The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)
- 1090 Vascular ring
- The term vascular ring refers to a group of congenital vascular anomalies that encircle and compress the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
- 1100 Pulmonary artery sling
- In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
- 1110 Aortic aneurysm (including pseudoaneurysm)
- An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include

		postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days)..
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplastm, etc.) which may result in death or lung or heart-lung transplant.
1150	Pectus	Pectus excavatum is a chest wall deformity in which the sternum is depressed. Pectus carinatum is a protrusion of the sternum.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final

		benign/malignant pathology determination.
1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of “Arrhythmia, Atrial”. “Arrhythmia, Atrial” ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of “Arrhythmia, Junctional”. “Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of “Arrhythmia, Ventricular”. “Arrhythmia, Ventricular” ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post-surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.

1220	Arrhythmia, Pacemaker, Indication for replacement	Indications for pacemaker replacement may include end of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.
2090	Dextrocardia	Indicate if the patient has the diagnosis of ‘‘Dextrocardia’’. ‘‘Dextrocardia’’ is most usually considered synonymous with a right-sided ventricular mass, whilst ‘‘dextroversion’’ is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2100	Levocardia	Indicate if the patient has the diagnosis of ‘‘Levocardia’’. ‘‘Levocardia’’ usually considered synonymous with a left-sided ventricular mass, whilst ‘‘levoverision’’ is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2110	Mesocardia	Indicate if the patient has the diagnosis of ‘‘Mesocardia’’. ‘‘Mesocardia’’ is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin

- RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
- 2120 Situs inversus
- Indicate if the patient has the diagnosis of “Situs inversus” of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as “situs solitus”. The mirror-imaged arrangement is also known as “situs inversus”. The term “visceroatrial situs” is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
- 1250 Aneurysm, Ventricular, Right (including pseudoaneurysm)
- An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
- 1260 Aneurysm, Ventricular, Left (including pseudoaneurysm)
- An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
- 1270 Aneurysm, Pulmonary artery
- An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
- 1280 Aneurysm, Other
- A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary

		artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of “Postoperative bleeding”.
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinitis occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvular (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of “Prosthetic valve failure”. This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis “Prosthetic valve failure”, as a secondary diagnosis “Pulmonary insufficiency”, and as a fundamental diagnosis “

		Tetralogy of Fallot”.
1340	Myocardial infarction	A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).
1350	Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothelioma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.
1360	Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collagen vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger's)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)".

		Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femoral vein, iliac artery, brachial artery, etc.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	Status post - Suture closure of patent foramen ovale (PFO).
4020	Status post - ASD repair, Primary closure	Status post - Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
4030	Status post - ASD repair,	Status post - Patch closure (using any type of patch

	Patch	material) of secundum, coronary sinus, or sinus venosus ASD.
4040	Status post - ASD repair, Device	Status post - Closure of any type ASD (including PFO) using a device.
6110	Status post - ASD repair, Patch + PAPVC repair	
4050	Status post - ASD, Common atrium (single atrium), Septation	Status post - Septation of common (single) atrium using any type patch material.
4060	Status post - ASD creation/enlargement	Status post - Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
4070	Status post - ASD partial closure	Status post - Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
4080	Status post - Atrial septal fenestration	Status post - Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
4085	Status post - Atrial fenestration closure	Status post - Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
4100	Status post - VSD repair, Primary closure	Status post - Suture closure of any type VSD.
4110	Status post - VSD repair, Patch	Status post - Patch closure (using any type of patch material) of any type VSD.
4120	Status post - VSD repair, Device	Status post - Closure of any type VSD using a device.
4130	Status post - VSD, Multiple, Repair	Status post - Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
4140	Status post - VSD creation/enlargement	Status post - Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
4150	Status post - Ventricular septal fenestration	Status post - Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the

		ventricular septum.
4170	Status post - AVC (AVSD) repair, Complete (CAVSD)	Status post - Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)	Status post - Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Status post - Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
6300	Status post - Valvuloplasty, Common atrioventricular valve	
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
6230	Status post - Valve replacement, Common atrioventricular valve	
4210	Status post - AP window repair	Status post - Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
4220	Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair	Status post - Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
4230	Status post - Truncus arteriosus repair	Status post - Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
4240	Status post - Valvuloplasty, Truncal valve	Status post - Truncal valve repair, any type.
6290	Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
4250	Status post - Valve replacement, Truncal valve	Status post - Replacement of the truncal valve with a prosthetic valve.

6220	Status post - Truncus + Interrupted aortic arch repair (IAA) repair	
4260	Status post - PAPVC repair	Status post - PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
4270	Status post - PAPVC, Scimitar, Repair	Status post - In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
6120	Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
4280	Status post - TAPVC repair	Status post - Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
6200	Status post - TAPVC repair + Shunt - systemic-to-pulmonary	
4290	Status post - Cor triatriatum repair	Status post - Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
4300	Status post - Pulmonary venous stenosis repair	Status post - Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
4310	Status post - Atrial baffle procedure (non-Mustard, non-Senning)	Status post - The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the

		right atrium.
4330	Status post - Anomalous systemic venous connection repair	Status post - With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
4340	Status post - Systemic venous stenosis repair	Status post - Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
4350	Status post - TOF repair, No ventriculotomy	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4360	Status post - TOF repair, Ventriculotomy, Nontransannular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4370	Status post - TOF repair, Ventriculotomy, Transannular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4380	Status post - TOF repair, RV-PA conduit	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
4390	Status post - TOF - AVC	Status post - Tetralogy of Fallot repair (assumes VSD

	(AVSD) repair	closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
4400	Status post - TOF - Absent pulmonary valve repair	Status post - Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
4420	Status post - Pulmonary atresia - VSD (including TOF, PA) repair	Status post - For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
4430	Status post - Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	Status post - In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
4440	Status post - Unifocalization MAPCA(s)	Status post - Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
4450	Status post - Occlusion MAPCA(s)	Status post - Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
4460	Status post - Valvuloplasty, Tricuspid	Status post - Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
6280	Status post - Valvuloplasty converted to valve	

	replacement in the same operation, Tricuspid	
4465	Status post - Ebstein's repair	Status post - To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
4470	Status post - Valve replacement, Tricuspid (TVR)	Status post - Replacement of the tricuspid valve with a prosthetic valve.
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)	Status post - In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
4490	Status post - Valve excision, Tricuspid (without replacement)	Status post - Excision of the tricuspid valve without placement of a valve prosthesis.
4500	Status post - Valve surgery, Other, Tricuspid	Status post - Other tricuspid valve surgery not specified in procedure codes.
4510	Status post - RVOT procedure	Status post - Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
4520	Status post - 1 1/2 ventricular repair	Status post - Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
4530	Status post - PA, reconstruction (plasty), Main (trunk)	Status post - Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Status post - Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely,

		branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Status post - Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
4570	Status post - DCRV repair	Status post - Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
4590	Status post - Valvuloplasty, Pulmonic	Status post - Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
4600	Status post - Valve replacement, Pulmonic (PVR)	Status post - Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
4630	Status post - Valve excision, Pulmonary (without replacement)	Status post - Excision of the pulmonary valve without placement of a valve prosthesis.
4640	Status post - Valve closure, Semilunar	Status post - Closure of a semilunar valve (pulmonic or aortic) by any technique.
4650	Status post - Valve surgery, Other, Pulmonic	Status post - Other pulmonic valve surgery not specified in procedure codes.
4610	Status post - Conduit placement, RV to PA	Status post - Placement of a conduit, any type, from RV to PA.
4620	Status post - Conduit placement, LV to PA	Status post - Placement of a conduit, any type, from LV to PA.
5774	Status post - Conduit placement, Ventricle to aorta	Status post - Placement of a conduit from the right or left ventricle to the aorta.
5772	Status post - Conduit placement, Other	Status post - Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
4580	Status post - Conduit reoperation	Status post - Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV

		to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
4660	Status post - Valvuloplasty, Aortic	Status post - Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic	
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	
4670	Status post - Valve replacement, Aortic (AVR)	Status post - Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
4680	Status post - Valve replacement, Aortic (AVR), Mechanical	Status post - Replacement of the aortic valve with a mechanical prosthetic valve.
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic	Status post - Replacement of the aortic valve with a bioprosthetic prosthetic valve.
4700	Status post - Valve replacement, Aortic (AVR), Homograft	Status post - Replacement of the aortic valve with a homograft prosthetic valve.
4715	Status post - Aortic root replacement, Bioprosthetic	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
4720	Status post - Aortic root replacement, Mechanical	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a

		composite conduit.
4730	Status post - Aortic root replacement, Homograft	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
4735	Status post - Aortic root replacement, Valve sparing	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
4740	Status post - Ross procedure	Status post - Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
4750	Status post - Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
4760	Status post - Ross-Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
4770	Status post - Other annular enlargement procedure	Status post - Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouagian and Nicks aortic annular enlargement procedures.
4780	Status post - Aortic stenosis, Subvalvar, Repair	Status post - Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myectomy, myotomy, myectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
4790	Status post - Aortic stenosis, Supravalvar, Repair	Status post - Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two

		sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
4800	Status post - Valve surgery, Other, Aortic	Status post - Other aortic valve surgery not specified in other procedure codes.
4810	Status post - Sinus of Valsalva, Aneurysm repair	Status post - Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.)). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
4820	Status post - LV to aorta tunnel repair	Status post - LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
4830	Status post - Valvuloplasty, Mitral	Status post - Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissurotomy, leaflet repair, or papillary muscle repair.
6260	Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral	
4840	Status post - Mitral stenosis, Supravalvar mitral ring repair	Status post - Supravalvar mitral ring repair.
4850	Status post - Valve replacement, Mitral (MVR)	Status post - Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
4860	Status post - Valve surgery, Other, Mitral	Status post - Other mitral valve surgery not specified in procedure codes.
4870	Status post - Norwood procedure	Status post - The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neo-aortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary

		connection. When coding the procedure “Norwood procedure”, the primary procedure of the operation should be “Norwood procedure”. The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices: 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery) 3. Shunt, Systemic to pulmonary, Other 4. Conduit placement, RV to PA 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) 8. HemiFontan
4880	Status post - HLHS biventricular repair	Status post - Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.
6160	Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands	Status post - A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
6170	Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)	Status post - A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques.

		Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
6180	Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands	Status post - A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
6140	Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)	Status post - A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”. It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
6150	Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair	Status post - A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”. It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
1590	Status post - Transplant, Heart	Status post - Heart transplantation, any technique, allograft or xenograft.
1610	Status post - Transplant, Heart and lung	Status post - Heart and lung (single or double) transplantation.
4910	Status post - Partial left	Status post - Wedge resection of LV muscle, with

	ventriculectomy (LV volume reduction surgery) (Batista)	suturing of cut edges together, to reduce LV volume.
4920	Status post - Pericardial drainage procedure	Status post - Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
4930	Status post - Pericardiectomy	Status post - Surgical removal of the pericardium.
4940	Status post - Pericardial procedure, Other	Status post - Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
4950	Status post - Fontan, Atrio-pulmonary connection	Status post - Fontan-type procedure with atrio-pulmonary connection.
4960	Status post - Fontan, Atrio-ventricular connection	Status post - Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
5000	Status post - Fontan, TCPC, External conduit, Fenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
5025	Status post - Fontan revision or conversion (Re-do Fontan)	Status post - Revision of a previous Fontan procedure to a total cavopulmonary connection.
5030	Status post - Fontan, Other	Status post - Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
6340	Status post - Fontan + Atrioventricular valvuloplasty	
5035	Status post - Ventricular septation	Status post - Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
5060	Status post - Congenitally	Status post - Repair of congenitally corrected TGA by

	corrected TGA repair, Atrial switch and Rastelli	concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
5070	Status post - Congenitally corrected TGA repair, VSD closure	Status post - Repair of congenitally corrected TGA by VSD closure only.
5080	Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Status post - Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
5090	Status post - Congenitally corrected TGA repair, Other	Status post - Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
5110	Status post - Arterial switch operation (ASO)	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
5120	Status post - Arterial switch operation (ASO) and VSD repair	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
5123	Status post - Arterial switch procedure + Aortic arch repair	Status post - Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
5125	Status post - Arterial switch procedure and VSD repair + Aortic arch repair	Status post - Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
5130	Status post - Senning	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
5140	Status post - Mustard	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.

5145	Status post - Atrial baffle procedure, Mustard or Senning revision	Status post - Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
5150	Status post - Rastelli	Status post - Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
5160	Status post - REV	Status post - The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
6190	Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
6210	Status post - TGA, Other procedures (Kawashima, LV-PA conduit, other)	
5180	Status post - DORV, Intraventricular tunnel repair	Status post - Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
5200	Status post - DOLV repair	Status post - Because of the morphologic variability of

		DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
5210	Status post - Coarctation repair, End to end	Status post - Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
5220	Status post - Coarctation repair, End to end, Extended	Status post - Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
5230	Status post - Coarctation repair, Subclavian flap	Status post - Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
5240	Status post - Coarctation repair, Patch aortoplasty	Status post - Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
5250	Status post - Coarctation repair, Interposition graft	Status post - Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
5260	Status post - Coarctation repair, Other	Status post - Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
5275	Status post - Coarctation repair + VSD repair	Status post - Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
5280	Status post - Aortic arch repair	Status post - Aortic arch repair, any technique.
5285	Status post - Aortic arch repair + VSD repair	Status post - Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
5290	Status post - Coronary artery fistula ligation	Status post - Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
5291	Status post - Anomalous origin of coronary artery from pulmonary artery repair	Status post - Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).

5300	Status post - Coronary artery bypass	Status post - Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
5305	Status post - Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
5310	Status post - Coronary artery procedure, Other	Status post - Any coronary artery procedure not specifically listed.
5320	Status post - Interrupted aortic arch repair	Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
5330	Status post - PDA closure, Surgical	Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
5340	Status post - PDA closure, Device	Status post - Closure of a PDA by device using transcatheter techniques.
5360	Status post - Vascular ring repair	Status post - Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
5365	Status post - Aortopexy	Status post - Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
5370	Status post - Pulmonary artery sling repair	Status post - Pulmonary artery sling repair by any technique.
5380	Status post - Aortic aneurysm repair	Status post - Aortic aneurysm repair by any technique.
5390	Status post - Aortic dissection repair	Status post - Aortic dissection repair by any technique.
5400	Status post - Lung biopsy	Status post - Lung biopsy, any technique.
1600	Status post - Transplant, Lung(s)	Status post - Lung or lobe transplantation of any type.
5420	Status post - Lung procedure, Other	Status post - Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
5430	Status post - Pectus repair	Status post - Repair of pectus excavatum or carinatum by any technique.
5440	Status post - Tracheal procedure	Status post - Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib

		cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
5450	Status post - Pacemaker implantation, Permanent	Status post - Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
5460	Status post - Pacemaker procedure	Status post - Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
6350	Status post - Explantation of pacing system	
5470	Status post - ICD (AICD) implantation	Status post - Implantation of an (automatic) implantable cardioverter defibrillator system.
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Status post - Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
5490	Status post - Arrhythmia surgery - atrial, Surgical Ablation	Status post - Surgical ablation (any type) of any atrial arrhythmia.
5500	Status post - Arrhythmia surgery - ventricular, Surgical Ablation	Status post - Surgical ablation (any type) of any ventricular arrhythmia.
6500	Status post - Cardiovascular catheterization procedure, Diagnostic	
6520	Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
6550	Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
6540	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
6510	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
6530	Status post - Cardiovascular catheterization procedure,	

- Diagnostic, Transluminal test
occlusion
- 6410 Status post - Cardiovascular
catheterization procedure,
Therapeutic
- 6670 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Adjunctive
therapy
- 6570 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Balloon dilation
- 6590 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Balloon
valvotomy
- 6600 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Coil implantation
- 6610 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Device
implantation
- 6640 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Perforation
(establishing interchamber
and/or intervessel
communication)
- 6580 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Septostomy
- 6620 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Stent insertion
- 6630 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Stent re-dilation
- 6650 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Transcatheter
Fontan completion
- 6660 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Transcatheter
implantation of valve
- 6680 Status post - Cardiovascular
electrophysiological

	catheterization procedure	
6690	Status post - Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation	
5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Status post - Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5600	Status post - Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	Status post - A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5610	Status post - Shunt, Systemic to pulmonary, Other	Status post - Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
5630	Status post - Shunt, Ligation and takedown	Status post - Takedown of any shunt.
6095	Status post - Shunt, Reoperation	
5640	Status post - PA banding (PAB)	Status post - Placement of a pulmonary artery band, any type.
5650	Status post - PA debanding	Status post - Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
5660	Status post - Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	Status post - In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
5670	Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Status post - Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
5680	Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Status post - Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
5690	Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Status post - Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
5700	Status post - HemiFontan	Status post - A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be

accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a “dam” between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.

6330	Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
6130	Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction	
5710	Status post - Palliation, Other	Status post - Any other palliative procedure not specifically listed.
6360	Status post - ECMO cannulation	
6370	Status post - ECMO decannulation	
5910	Status post - ECMO procedure	Status post - Any ECMO procedure (cannulation, decannulation, etc.).
5900	Status post - Intraaortic balloon pump (IABP) insertion	Status post - Insertion of intraaortic balloon pump by any technique.
5920	Status post - Right/left heart assist device procedure	Status post - Any right, left, or biventricular assist device procedure (placement, removal etc.).
6390	Status post - VAD explantation	
6380	Status post - VAD implantation	
6420	Status post - Echocardiography procedure, Sedated transesophageal echocardiogram	
6430	Status post - Echocardiography procedure, Sedated transthoracic echocardiogram	

6435	Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	
6440	Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
6450	Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
6460	Status post - Radiology procedure on cardiac patient, Diagnostic radiology	
6470	Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
6490	Status post - Interventional radiology procedure on cardiac patient	
5720	Status post - Aneurysm, Ventricular, Right, Repair	Status post - Repair of right ventricular aneurysm, any technique.
5730	Status post - Aneurysm, Ventricular, Left, Repair	Status post - Repair of left ventricular aneurysm, any technique.
5740	Status post - Aneurysm, Pulmonary artery, Repair	Status post - Repair of pulmonary artery aneurysm, any technique.
5760	Status post - Cardiac tumor resection	Status post - Resection of cardiac tumor, any type.
5780	Status post - Pulmonary AV fistula repair/occlusion	Status post - Repair or occlusion of a pulmonary arteriovenous fistula.
5790	Status post - Ligation, Pulmonary artery	Status post - Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus	Status post - Acute pulmonary embolism (clot) removal, through catheter or surgery.
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus	Status post - Chronic pulmonary embolism (clot) removal, through catheter or surgery.
5810	Status post - Pleural drainage	Status post - Pleural drainage procedure via

	procedure	thoracocentesis, tube thoracostomy, or open surgical drainage.
5820	Status post - Pleural procedure, Other	Status post - Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
5830	Status post - Ligation, Thoracic duct	Status post - Ligation of the thoracic duct; most commonly for persistent chylothorax.
5840	Status post - Decortication	Status post - Decortication of the lung by any technique.
5850	Status post - Esophageal procedure	Status post - Any procedure performed on the esophagus.
5860	Status post - Mediastinal procedure	Status post - Any non-cardiovascular mediastinal procedure not otherwise listed.
5870	Status post - Bronchoscopy	Status post - Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
5880	Status post - Diaphragm plication	Status post - Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
5890	Status post - Diaphragm procedure, Other	Status post - Any diaphragm procedure not specifically listed.
5930	Status post - VATS (video-assisted thoracoscopic surgery)	Status post - Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
5940	Status post - Minimally invasive procedure	Status post - Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
5950	Status post - Bypass for noncardiac lesion	Status post - Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
5960	Status post - Delayed sternal closure	Status post - Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
5970	Status post - Mediastinal exploration	Status post - Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
5980	Status post - Sternotomy wound drainage	Status post - Drainage of the sternotomy wound.

5990	Status post - Thoracotomy, Other	Status post - Any procedure performed through a thoracotomy incision not otherwise listed.
6000	Status post - Cardiomy, Other	Status post - Any procedure involving an incision in the heart that is not otherwise listed.
6010	Status post - Cardiac procedure, Other	Status post - Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
6020	Status post - Thoracic and/or mediastinal procedure, Other	Status post - Any thoracic and/or mediastinal procedure not otherwise listed.
6030	Status post - Peripheral vascular procedure, Other	Status post - Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
6040	Status post - Miscellaneous procedure, Other	Status post - Any miscellaneous procedure not otherwise listed.
6050	Status post - Organ procurement	Status post - Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
11777	Status post - Other procedure	Status post - Any procedure on any organ system not otherwise listed.

Long Name: Other Card-Congenital Diagnosis 2 *SeqNo:* 5320
Short Name: **OCarCongDiag2** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the second of the three most significant congenital diagnoses.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Congenital *Format:* Text (categorical values specified by STS)

ParentShortName: OCarCong *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
10	PFO	Small interatrial communication in the region of the foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency of the septum secundum.
20	ASD, Secundum	An ASD confined to the region of the fossa ovalis; its most common etiology is a deficiency of the septum primum, but deficiency of the limbus or septum secundum may also contribute.
30	ASD, Sinus venosus	Indicate if the patient has the diagnosis of "ASD, Sinus venosus". An "ASD, Sinus venosus" is defined as a defect with a vena cava or pulmonary vein (or veins)

		that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the true atrial septum.
40	ASD, Coronary sinus	Deficiency of the wall (sinus septum) separating the left atrium from the coronary sinus, often allowing blood to shunt from the left atrium to the right atrium via the coronary sinus ostium. May or may not be associated with a persistent left superior vena cava.
50	ASD, Common atrium (single atrium)	Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.
71	VSD, Type 1 (Subarterial) (Supracristal) (Conal septal defect) (Infundibular)	A VSD that lies beneath the semilunar valve(s) in the conal or outlet septum.
73	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.
75	VSD, Type 3 (Inlet) (AV canal type)	A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.
77	VSD, Type 4 (Muscular)	A VSD completely surrounded by muscle.
79	VSD, Type: Gerbode type (LV-RA communication)	A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.
80	VSD, Multiple	More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.
100	AVC (AVSD), Complete (CAVSD)	Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately

- small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the ventricular septum without chordal attachment to the crest of the ventricular septum.
- 110 AVC (AVSD), Intermediate (transitional) An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.
- 120 AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum) An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.
- 140 AP window (aortopulmonary window) Indicate if the patient has the diagnosis of "AP window (aortopulmonary window)". An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal

- defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code “Interrupted aortic arch + AP window (aortopulmonary window)”, and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)
- 150 Pulmonary artery origin from ascending aorta (hemitruncus) One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.
- 160 Truncus arteriosus Indicate if the patient has the diagnosis of “Truncus arteriosus”. A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.
- 170 Truncal valve insufficiency Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).
- 2010 Truncus arteriosus + Interrupted aortic arch Indicate if the patient has the diagnosis of “Truncus arteriosus + Interrupted aortic arch”. {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum

- (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.) {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}
- 180 Partial anomalous pulmonary venous connection (PAPVC) Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).
- 190 Partial anomalous pulmonary venous connection (PAPVC), scimitar The right pulmonary vein(s) connect anomalously to the inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.
- 200 Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac) All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.
- 210 Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac) All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.
- 220 Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac) All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary

- venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.
- 230 Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed) All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.
- 250 Cor triatriatum In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supravalar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supravalar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
- 260 Pulmonary venous stenosis Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).
- 270 Systemic venous anomaly Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.
- 280 Systemic venous obstruction Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC),

	brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
290 TOF	<p>Indicate if the patient has the diagnosis of "TOF". Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). "TOF, Pulmonary stenosis", (2). "TOF, AVC (AVSD)", (3). "TOF, Absent pulmonary valve", (4). "Pulmonary atresia, VSD (Including TOF, PA)", or (5). "Pulmonary atresia, VSD-MAPCA (pseudotruncus)". {"TOF" is "Tetralogy of Fallot" and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.} (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as "VSD, Type 4 (Muscular)". Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")</p>
2140 TOF, Pulmonary stenosis	Indicate if the patient has the diagnosis of "TOF, Pulmonary stenosis". Use this diagnosis if the patient

has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal.

{Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as “VSD, Type 4 (Muscular)”. Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}

300 TOF, AVC (AVSD)

TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.

310 TOF, Absent pulmonary valve

Indicate if the patient has the diagnosis of “TOF, Absent pulmonary valve”. “TOF, Absent pulmonary valve” is “Tetralogy of Fallot with Absent pulmonary valve” and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior

- deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semi-lunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilatation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with pulmonary valve stenosis and regurgitation, comprise the physiologic conditions which predispose to central pulmonary artery dilatation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)
- 320 Pulmonary atresia
Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.
- 330 Pulmonary atresia, IVS
Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.
- 340 Pulmonary atresia, VSD
(Including TOF, PA)
Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance)

- and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code should not be used; instead, Pulmonary atresia, VSD-MAPCA (pseudotruncus) should be used.
- 350 Pulmonary atresia, VSD-MAPCA (pseudotruncus)
- MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.
- 360 MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD)
- Rarely MAPCA(s) may occur in patients who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.
- 370 Ebstein's anomaly
- Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle

		<p>with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilatation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be coded with a Primary Diagnosis of "Ebstein's anomaly", and a Secondary Diagnosis of "Pulmonary atresia".) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with "Congenitally corrected TGA" and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of "Congenitally corrected TGA", and a Secondary Diagnosis of "Ebstein's anomaly".)</p>
380	Tricuspid regurgitation, non-Ebstein's related	Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).
390	Tricuspid stenosis	Tricuspid stenosis may be due to congenital factors (valvular hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).
400	Tricuspid regurgitation and tricuspid stenosis	Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.
410	Tricuspid valve, Other	Tricuspid valve pathology not otherwise specified in

- diagnosis definitions 370, 380, 390 and 400.
- 420 Pulmonary stenosis, Valvar Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.
- 430 Pulmonary artery stenosis (hypoplasia), Main (trunk) Indicate if the patient has the diagnosis of “Pulmonary artery stenosis (hypoplasia), Main (trunk)”. “Pulmonary artery stenosis (hypoplasia), Main (trunk)” is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the narrowing is distal to the pulmonic valve, it may also be known as supra-valvar pulmonary stenosis.
- 440 Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation) Indicate if the patient has the diagnosis of “Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)”. “Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)” is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
- 450 Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation) Indicate if the patient has the diagnosis of “Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)”. “Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)” is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
- 470 Pulmonary artery, Discontinuous Indicate if the patient has the diagnosis of “Pulmonary artery, Discontinuous”. Pulmonary artery, Discontinuous” is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
- 490 Pulmonary stenosis, Subvalvar Subvalvar (infundibular) pulmonary stenosis is a

		narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.
500	DCRV	The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.
510	Pulmonary valve, Other	Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
530	Pulmonary insufficiency	Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy of Fallot, etc.).
540	Pulmonary insufficiency and pulmonary stenosis	Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supra-annular stenosis.
2130	Shunt failure	Indicate if the patient has the diagnosis of “Shunt failure”. This diagnostic subgroup includes failure of any of a variety of shunts (“Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)”, “Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)”, “Shunt, Systemic to pulmonary, Other”, and “Sano Shunt”), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis (“Shunt failure”) would be the primary diagnosis in a patient with, for example, “Hypoplastic left heart syndrome (HLHS)” who underwent a “Norwood procedure” with a “Modified Blalock-Taussig Shunt” and now requires reoperation for thrombosis of the “Modified Blalock-Taussig Shunt”. The underlying or fundamental diagnosis in this patient is “Hypoplastic left heart syndrome (HLHS)”, but the primary diagnosis for the operation to be performed to treat the thrombosis of the “Modified Blalock-Taussig Shunt” would be “Shunt failure”.

Please note that the choice “2130 Shunt failure” does not include “520 Conduit failure”.

- 520 Conduit failure
- Indicate if the patient has the diagnosis of “Conduit failure”. This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis (“Conduit failure”) would be the primary diagnosis in a patient with, for example, “Truncus arteriosus” repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is “Truncus arteriosus”, but the primary diagnosis for the operation to be performed during the hospitalization (in this case, “Conduit reoperation”) would be “Conduit failure”.
- Please note that the choice “520 Conduit failure” does not include “2130 Shunt failure”.
- 550 Aortic stenosis, Subvalvar
- Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supralvalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also known as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.
- 560 Aortic stenosis, Valvar
- Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with

- a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphe radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.
- 570 Aortic stenosis, Supravalvar Congenital supravalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia. Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neo-aortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.
- 590 Aortic valve atresia Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.
- 600 Aortic insufficiency Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet

- abnormality; (2) in association with a VSD (especially in supracristal or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supra-aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neo-aorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annulo-aortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.
- 610 Aortic insufficiency and aortic stenosis
Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.
- 620 Aortic valve, Other
This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (normal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.
- 630 Sinus of Valsalva aneurysm
The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus

acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.

640 LV to aorta tunnel

The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.

650 Mitral stenosis, Supravalvar mitral ring

Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior

		compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supra-valvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
660	Mitral stenosis, Valvar	Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
670	Mitral stenosis, Subvalvar	Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
680	Mitral stenosis, Subvalvar, Parachute	In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilatation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supra-valvar mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
695	Mitral stenosis	Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.
700	Mitral regurgitation and mitral stenosis	Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components

		of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
710	Mitral regurgitation	Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilatation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
720	Mitral valve, Other	Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.
730	Hypoplastic left heart syndrome (HLHS)	Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.
2080	Shone's syndrome	Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supravulvar ring of the left atrium, (2) a

- parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of “parachute mitral valve”, supralvalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. *Am J Cardiol* 1963; 11: 714–725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. *Cardiology in the Young*, 2006; 16(4): 339–368, August 2006.
- Please note that the term “2080 Shone’s syndrome” may be the “Fundamental Diagnosis” of a patient; however, the term “2080 Shone’s syndrome” may not be the “Primary Diagnosis” of an operation. The term “2080 Shone’s syndrome” may be a “Secondary Diagnosis” of an operation.
- 740 Cardiomyopathy (including dilated, restrictive, and hypertrophic)
- Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be divided into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilatation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl’s syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3) spongiform cardiomyopathy.
- 750 Cardiomyopathy, End-stage congenital heart disease
- Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
- 760 Pericardial effusion
- Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic,

		drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	Single morphologically left ventricle (smooth internal walls, lack chordal attachments of AV valves to the rudimentary septal surface) that receives both atrioventricular valves.
800	Single ventricle, DIRV	Single morphologically right ventricle (more heavily trabeculated, generally have chordal attachments of AV valve to the septal surfaces) that receives both atrioventricular valves.
810	Single ventricle, Mitral atresia	Single ventricle anomalies with mitral atresia. May also be associated with double outlet right ventricle, congenitally corrected transposition, pulmonary atresia, or pulmonary stenosis.
820	Single ventricle, Tricuspid atresia	Single ventricle anomalies with tricuspid atresia. May also be associated with complete transposition of the great arteries, congenitally corrected transposition of the great arteries, pulmonary atresia, pulmonary stenosis, subaortic stenosis, or ventricular septal defect (small or large).
830	Single ventricle, Unbalanced AV canal	Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)-type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)-type or RV-dominant AV septal defect.
840	Single ventricle, Heterotaxia syndrome	Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral

symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome. Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome.

850 Single ventricle, Other

If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.

851 Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)	Indicate if the patient has the diagnosis of “Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)”. In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code “Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)”, and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {“Total anomalous pulmonary venous connection (TAPVC)” is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.} {The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term “single ventricle” as synonymous for the “functionally univentricular heart”. (The functionally univentricular heart is defined as a spectrum of cardiac malformations in which entire ventricular mass is functionally univentricular; in other words, whenever only one ventricle is capable, for whatever reason, of supporting either the systemic or the pulmonary circulation.) The consensus of the EACTS and STS Congenital Heart Surgery Database Committees is that the nomenclature proposal for single ventricle hearts would encompass hearts with double inlet atrioventricular connection (both double inlet left ventricle [DILV] and double inlet right ventricle [DIRV]), hearts with absence of one atrioventricular connection (mitral atresia and tricuspid atresia), hearts with a common atrioventricular valve and only one completely well-developed ventricle (unbalanced common atrioventricular canal defect), hearts with only one fully well-developed ventricle and heterotaxia syndrome (single ventricle heterotaxia syndrome), and finally other rare forms of univentricular hearts that do not fit in one of the specified major categories. In the version of the IPCCC derived from the nomenclature of the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and the STS, patients classified in this section of the nomenclature, therefore, include all those who would be coded using the Short List for “Single Ventricle”, specifically: (1) Single ventricle; (2) Single ventricle, DILV; (3) Single ventricle, DIRV; (4) Single ventricle, Heterotaxia syndrome; (5) Single ventricle, Mitral atresia; (6) Single ventricle, Tricuspid atresia; (7) Single ventricle, Unbalanced AV canal. (Despite the recognition that hypoplastic left heart syndrome is a
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common form of functionally univentricular heart, with a single or dominant ventricle of right ventricular morphology, the EACTS-STS version of the IPCCC includes an entirely separate section for consideration of hypoplastic left heart syndrome. Also, it is recognized that a considerable variety of other structural cardiac malformations, such as pulmonary atresia with intact ventricular septum, biventricular hearts with straddling atrioventricular valves, and some complex forms of double outlet right ventricle (DORV), may at times be best managed in a fashion similar to that which is used to treat other functionally univentricular hearts.

Nomenclature for description of those entities, however, is not included in this Single Ventricle section of the EACTS-STS version of the IPCCC.)} [1] [1]. Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16, Supplement 1: 9 – 21, February 2006.

870 Congenitally corrected TGA

Indicate if the patient has the diagnosis of “Congenitally corrected TGA”. Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.

872 Congenitally corrected TGA, IVS

Indicate if the patient has the diagnosis of “Congenitally corrected TGA, IVS”. “Congenitally corrected TGA, IVS” is “Congenitally corrected transposition with an intact ventricular septum”, in other words, “

- Congenitally corrected transposition with no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)
- 874 Congenitally corrected TGA, IVS-LVOTO Indicate if the patient has the diagnosis of "Congenitally corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, "Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)
- 876 Congenitally corrected TGA, VSD Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a

- VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)
- 878 Congenitally corrected TGA, VSD-LVOTO Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally corrected TGA, VSD-LVOTO" is "Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)
- 880 TGA, IVS A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects

- with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 890 TGA, IVS-LVOTO A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 900 TGA, VSD A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 910 TGA, VSD-LVOTO A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 930 DORV, VSD type Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and

- pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 940 DORV, TOF type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.
- 950 DORV, TGA type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.

- 960 DORV, Remote VSD (uncommitted VSD) Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 2030 DORV + AVSD (AV Canal) Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.
- 975 DORV, IVS Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 980 DOLV Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with

		DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
990	Coarctation of aorta	Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.
1000	Aortic arch hypoplasia	Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending aorta.
92	VSD + Aortic arch hypoplasia	A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)
94	VSD + Coarctation of aorta	Indicate if the patient has the diagnosis of "VSD + Coarctation of aorta". In the event of a VSD occurring in association with Coarctation of aorta, code "VSD + Coarctation of aorta", and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.}
1010	Coronary artery anomaly,	Anomalous aortic origins of the coronary arteries

	Anomalous aortic origin of coronary artery from aorta (AAOCA)	include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.
1020	Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA)	In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.
1030	Coronary artery anomaly, Fistula	The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.
1040	Coronary artery anomaly, Aneurysm	Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.
1050	Coronary artery anomaly, Other	Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).
1070	Interrupted aortic arch	Indicate if the patient has the diagnosis of "Interrupted

aortic arch". Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.

2020 Interrupted aortic arch + VSD

Indicate if the patient has the diagnosis of "Interrupted aortic arch + VSD". In the event of interrupted aortic arch occurring in association with VSD, code "Interrupted aortic arch + VSD", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}

2000 Interrupted aortic arch + AP window (aortopulmonary window)

Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to

the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An “AP window (aortopulmonary window)” is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code “Interrupted aortic arch + AP window (aortopulmonary window)”, and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)}

1080 Patent ductus arteriosus

Indicate if the patient has the diagnosis of “Patent ductus arteriosus”. The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with

		the main pulmonary artery. Origination and insertion sites can be variable, however.)
1090	Vascular ring	The term vascular ring refers to a group of congenital vascular anomalies that encircle and compress the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
1100	Pulmonary artery sling	In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
1110	Aortic aneurysm (including pseudoaneurysm)	An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days)..
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplasm, etc.) which may result in death or lung or heart-lung transplant.
1150	Pectus	Pectus excavatum is a chest wall deformity in which the sternum is depressed. Pectus carinatum is a protrusion of the sternum.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway

		pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.
1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of "Arrhythmia, Atrial". "Arrhythmia, Atrial" ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of "Arrhythmia, Junctional". "Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 –

		530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of “Arrhythmia, Ventricular”. “Arrhythmia, Ventricular” ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post-surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker, Indication for replacement	Indications for pacemaker replacement may include end of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.
2090	Dextrocardia	Indicate if the patient has the diagnosis of “Dextrocardia”. “Dextrocardia” is most usually considered synonymous with a right-sided ventricular mass, whilst ‘dextroversion’ is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2100	Levocardia	Indicate if the patient has the diagnosis of “Levocardia”

- . “Levocardia” usually considered synonymous with a left-sided ventricular mass, whilst “levoverision” is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
- 2110 Mesocardia
- Indicate if the patient has the diagnosis of “Mesocardia”. “Mesocardia” is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
- 2120 Situs inversus
- Indicate if the patient has the diagnosis of “Situs inversus” of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as “situs solitus”. The mirror-imaged arrangement is also known as “situs inversus”. The term “visceroatrial situs” is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the

		Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. <i>Cardiology in the Young</i> , Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
1250	Aneurysm, Ventricular, Right (including pseudoaneurysm)	An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
1260	Aneurysm, Ventricular, Left (including pseudoaneurysm)	An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
1270	Aneurysm, Pulmonary artery	An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
1280	Aneurysm, Other	A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of “Postoperative bleeding”.
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinitis occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or

		prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvular (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of "Prosthetic valve failure". This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis "Prosthetic valve failure", as a secondary diagnosis "Pulmonary insufficiency", and as a fundamental diagnosis "Tetralogy of Fallot".
1340	Myocardial infarction	A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).
1350	Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothelioma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.
1360	Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula)

		between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collagen vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger's)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.

1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femoral vein, iliac artery, brachial artery, etc.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	Status post - Suture closure of patent foramen ovale (PFO).
4020	Status post - ASD repair, Primary closure	Status post - Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
4030	Status post - ASD repair, Patch	Status post - Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
4040	Status post - ASD repair, Device	Status post - Closure of any type ASD (including PFO) using a device.
6110	Status post - ASD repair, Patch + PAPVC repair	
4050	Status post - ASD, Common atrium (single atrium), Septation	Status post - Septation of common (single) atrium using any type patch material.
4060	Status post - ASD creation/enlargement	Status post - Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
4070	Status post - ASD partial closure	Status post - Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
4080	Status post - Atrial septal fenestration	Status post - Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
4085	Status post - Atrial fenestration closure	Status post - Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
4100	Status post - VSD repair, Primary closure	Status post - Suture closure of any type VSD.
4110	Status post - VSD repair, Patch	Status post - Patch closure (using any type of patch material) of any type VSD.
4120	Status post - VSD repair,	Status post - Closure of any type VSD using a device.

	Device	
4130	Status post - VSD, Multiple, Repair	Status post - Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
4140	Status post - VSD creation/enlargement	Status post - Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
4150	Status post - Ventricular septal fenestration	Status post - Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
4170	Status post - AVC (AVSD) repair, Complete (CAVSD)	Status post - Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)	Status post - Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Status post - Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
6300	Status post - Valvuloplasty, Common atrioventricular valve	
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
6230	Status post - Valve replacement, Common atrioventricular valve	
4210	Status post - AP window repair	Status post - Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
4220	Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair	Status post - Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
4230	Status post - Truncus	Status post - Truncus arteriosus repair that most

	arteriosus repair	frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
4240	Status post - Valvuloplasty, Truncal valve	Status post - Truncal valve repair, any type.
6290	Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
4250	Status post - Valve replacement, Truncal valve	Status post - Replacement of the truncal valve with a prosthetic valve.
6220	Status post - Truncus + Interrupted aortic arch repair (IAA) repair	
4260	Status post - PAPVC repair	Status post - PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
4270	Status post - PAPVC, Scimitar, Repair	Status post - In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
6120	Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
4280	Status post - TAPVC repair	Status post - Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.

6200	Status post - TAPVC repair + Shunt - systemic-to-pulmonary	
4290	Status post - Cor triatriatum repair	Status post - Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
4300	Status post - Pulmonary venous stenosis repair	Status post - Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
4310	Status post - Atrial baffle procedure (non-Mustard, non-Senning)	Status post - The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
4330	Status post - Anomalous systemic venous connection repair	Status post - With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
4340	Status post - Systemic venous stenosis repair	Status post - Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
4350	Status post - TOF repair, No ventriculotomy	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4360	Status post - TOF repair, Ventriculotomy, Nontransannular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the

		ventricle itself may be minimal.
4370	Status post - TOF repair, Ventriculotomy, Transannular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4380	Status post - TOF repair, RV-PA conduit	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
4390	Status post - TOF - AVC (AVSD) repair	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
4400	Status post - TOF - Absent pulmonary valve repair	Status post - Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
4420	Status post - Pulmonary atresia - VSD (including TOF, PA) repair	Status post - For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
4430	Status post - Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	Status post - In the presence of MAPCAs, this code implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
4440	Status post - Unifocalization MAPCA(s)	Status post - Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.

4450	Status post - Occlusion MAPCA(s)	Status post - Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
4460	Status post - Valvuloplasty, Tricuspid	Status post - Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
6280	Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
4465	Status post - Ebstein's repair	Status post - To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
4470	Status post - Valve replacement, Tricuspid (TVR)	Status post - Replacement of the tricuspid valve with a prosthetic valve.
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)	Status post - In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
4490	Status post - Valve excision, Tricuspid (without replacement)	Status post - Excision of the tricuspid valve without placement of a valve prosthesis.
4500	Status post - Valve surgery, Other, Tricuspid	Status post - Other tricuspid valve surgery not specified in procedure codes.
4510	Status post - RVOT procedure	Status post - Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.

4520	Status post - 1 1/2 ventricular repair	Status post - Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
4530	Status post - PA, reconstruction (plasty), Main (trunk)	Status post - Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Status post - Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Status post - Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
4570	Status post - DCRV repair	Status post - Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
4590	Status post - Valvuloplasty, Pulmonic	Status post - Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
4600	Status post - Valve replacement, Pulmonic (PVR)	Status post - Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
4630	Status post - Valve excision, Pulmonary (without	Status post - Excision of the pulmonary valve without placement of a valve prosthesis.

	replacement)	
4640	Status post - Valve closure, Semilunar	Status post - Closure of a semilunar valve (pulmonic or aortic) by any technique.
4650	Status post - Valve surgery, Other, Pulmonic	Status post - Other pulmonic valve surgery not specified in procedure codes.
4610	Status post - Conduit placement, RV to PA	Status post - Placement of a conduit, any type, from RV to PA.
4620	Status post - Conduit placement, LV to PA	Status post - Placement of a conduit, any type, from LV to PA.
5774	Status post - Conduit placement, Ventricle to aorta	Status post - Placement of a conduit from the right or left ventricle to the aorta.
5772	Status post - Conduit placement, Other	Status post - Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
4580	Status post - Conduit reoperation	Status post - Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
4660	Status post - Valvuloplasty, Aortic	Status post - Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic	
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	
4670	Status post - Valve replacement, Aortic (AVR)	Status post - Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.

4680	Status post - Valve replacement, Aortic (AVR), Mechanical	Status post - Replacement of the aortic valve with a mechanical prosthetic valve.
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic	Status post - Replacement of the aortic valve with a bioprosthetic prosthetic valve.
4700	Status post - Valve replacement, Aortic (AVR), Homograft	Status post - Replacement of the aortic valve with a homograft prosthetic valve.
4715	Status post - Aortic root replacement, Bioprosthetic	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
4720	Status post - Aortic root replacement, Mechanical	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
4730	Status post - Aortic root replacement, Homograft	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
4735	Status post - Aortic root replacement, Valve sparing	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
4740	Status post - Ross procedure	Status post - Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
4750	Status post - Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
4760	Status post - Ross-Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
4770	Status post - Other annular enlargement procedure	Status post - Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouagian and Nicks aortic annular enlargement procedures.
4780	Status post - Aortic stenosis, Subvalvar, Repair	Status post - Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy,

		myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
4790	Status post - Aortic stenosis, Supravalvar, Repair	Status post - Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
4800	Status post - Valve surgery, Other, Aortic	Status post - Other aortic valve surgery not specified in other procedure codes.
4810	Status post - Sinus of Valsalva, Aneurysm repair	Status post - Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.)). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
4820	Status post - LV to aorta tunnel repair	Status post - LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
4830	Status post - Valvuloplasty, Mitral	Status post - Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissurotomy, leaflet repair, or papillary muscle repair.
6260	Status post - Valvuloplasty converted to valve	

	replacement in the same operation, Mitral	
4840	Status post - Mitral stenosis, Supravalvar mitral ring repair	Status post - Supravalvar mitral ring repair.
4850	Status post - Valve replacement, Mitral (MVR)	Status post - Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
4860	Status post - Valve surgery, Other, Mitral	Status post - Other mitral valve surgery not specified in procedure codes.
4870	Status post - Norwood procedure	<p>Status post - The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neo-aortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.</p> <p>When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:</p> <ol style="list-style-type: none"> 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery) 3. Shunt, Systemic to pulmonary, Other 4. Conduit placement, RV to PA 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) 8. HemiFontan
4880	Status post - HLHS biventricular repair	Status post - Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.
6160	Status post - Hybrid	Status post - A "Hybrid Procedure" is defined as a

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|------|---|---|
| | Approach "Stage 1", Application of RPA & LPA bands | procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". |
| 6170 | Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) | Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". |
| 6180 | Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands | Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". |
| 6140 | Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding) | Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure. |
| 6150 | Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic | Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of |

	arch repair	procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”. It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
1590	Status post - Transplant, Heart	Status post - Heart transplantation, any technique, allograft or xenograft.
1610	Status post - Transplant, Heart and lung	Status post - Heart and lung (single or double) transplantation.
4910	Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Status post - Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
4920	Status post - Pericardial drainage procedure	Status post - Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
4930	Status post - Pericardiectomy	Status post - Surgical removal of the pericardium.
4940	Status post - Pericardial procedure, Other	Status post - Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
4950	Status post - Fontan, Atrio-pulmonary connection	Status post - Fontan-type procedure with atrio-pulmonary connection.
4960	Status post - Fontan, Atrio-ventricular connection	Status post - Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
5000	Status post - Fontan, TCPC, External conduit, Fenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
5025	Status post - Fontan revision or conversion (Re-do Fontan)	Status post - Revision of a previous Fontan procedure to a total cavopulmonary connection.

5030	Status post - Fontan, Other	Status post - Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
6340	Status post - Fontan + Atrioventricular valvuloplasty	
5035	Status post - Ventricular septation	Status post - Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
5060	Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
5070	Status post - Congenitally corrected TGA repair, VSD closure	Status post - Repair of congenitally corrected TGA by VSD closure only.
5080	Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Status post - Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
5090	Status post - Congenitally corrected TGA repair, Other	Status post - Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
5110	Status post - Arterial switch operation (ASO)	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
5120	Status post - Arterial switch operation (ASO) and VSD repair	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
5123	Status post - Arterial switch procedure + Aortic arch repair	Status post - Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
5125	Status post - Arterial switch procedure and VSD repair + Aortic arch repair	Status post - Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.

5130	Status post - Senning	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a “physiological repair”. The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
5140	Status post - Mustard	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a “physiological repair”. The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
5145	Status post - Atrial baffle procedure, Mustard or Senning revision	Status post - Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
5150	Status post - Rastelli	Status post - Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
5160	Status post - REV	Status post - The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous

		patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
6190	Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
6210	Status post - TGA, Other procedures (Kawashima, LV-PA conduit, other)	
5180	Status post - DORV, Intraventricular tunnel repair	Status post - Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
5200	Status post - DOLV repair	Status post - Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
5210	Status post - Coarctation repair, End to end	Status post - Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
5220	Status post - Coarctation repair, End to end, Extended	Status post - Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
5230	Status post - Coarctation repair, Subclavian flap	Status post - Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
5240	Status post - Coarctation repair, Patch aortoplasty	Status post - Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
5250	Status post - Coarctation repair, Interposition graft	Status post - Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
5260	Status post - Coarctation repair, Other	Status post - Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
5275	Status post - Coarctation repair + VSD repair	Status post - Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.

5280	Status post - Aortic arch repair	Status post - Aortic arch repair, any technique.
5285	Status post - Aortic arch repair + VSD repair	Status post - Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
5290	Status post - Coronary artery fistula ligation	Status post - Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
5291	Status post - Anomalous origin of coronary artery from pulmonary artery repair	Status post - Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
5300	Status post - Coronary artery bypass	Status post - Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
5305	Status post - Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
5310	Status post - Coronary artery procedure, Other	Status post - Any coronary artery procedure not specifically listed.
5320	Status post - Interrupted aortic arch repair	Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
5330	Status post - PDA closure, Surgical	Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
5340	Status post - PDA closure, Device	Status post - Closure of a PDA by device using transcatheter techniques.
5360	Status post - Vascular ring repair	Status post - Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
5365	Status post - Aortopexy	Status post - Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
5370	Status post - Pulmonary artery sling repair	Status post - Pulmonary artery sling repair by any technique.
5380	Status post - Aortic aneurysm repair	Status post - Aortic aneurysm repair by any technique.
5390	Status post - Aortic dissection repair	Status post - Aortic dissection repair by any technique.

5400	Status post - Lung biopsy	Status post - Lung biopsy, any technique.
1600	Status post - Transplant, Lung(s)	Status post - Lung or lobe transplantation of any type.
5420	Status post - Lung procedure, Other	Status post - Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
5430	Status post - Pectus repair	Status post - Repair of pectus excavatum or carinatum by any technique.
5440	Status post - Tracheal procedure	Status post - Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
5450	Status post - Pacemaker implantation, Permanent	Status post - Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
5460	Status post - Pacemaker procedure	Status post - Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
6350	Status post - Explantation of pacing system	
5470	Status post - ICD (AICD) implantation	Status post - Implantation of an (automatic) implantable cardioverter defibrillator system.
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Status post - Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
5490	Status post - Arrhythmia surgery - atrial, Surgical Ablation	Status post - Surgical ablation (any type) of any atrial arrhythmia.
5500	Status post - Arrhythmia surgery - ventricular, Surgical Ablation	Status post - Surgical ablation (any type) of any ventricular arrhythmia.
6500	Status post - Cardiovascular catheterization procedure, Diagnostic	
6520	Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic	

- data obtained
- 6550 Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration
 - 6540 Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration
 - 6510 Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained
 - 6530 Status post - Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion
 - 6410 Status post - Cardiovascular catheterization procedure, Therapeutic
 - 6670 Status post - Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy
 - 6570 Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon dilation
 - 6590 Status post - Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy
 - 6600 Status post - Cardiovascular catheterization procedure, Therapeutic, Coil implantation
 - 6610 Status post - Cardiovascular catheterization procedure, Therapeutic, Device implantation
 - 6640 Status post - Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)
 - 6580 Status post - Cardiovascular catheterization procedure, Therapeutic, Septostomy
 - 6620 Status post - Cardiovascular

	catheterization procedure, Therapeutic, Stent insertion	
6630	Status post - Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	
6650	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
6660	Status post - Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	
6680	Status post - Cardiovascular electrophysiological catheterization procedure	
6690	Status post - Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation	
5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Status post - Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5600	Status post - Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	Status post - A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5610	Status post - Shunt, Systemic to pulmonary, Other	Status post - Placement of any other systemic-to- pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
5630	Status post - Shunt, Ligation and takedown	Status post - Takedown of any shunt.
6095	Status post - Shunt, Reoperation	
5640	Status post - PA banding (PAB)	Status post - Placement of a pulmonary artery band, any type.
5650	Status post - PA debanding	Status post - Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
5660	Status post - Damus-Kaye- Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	Status post - In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
5670	Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional	Status post - Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery

	Glenn)	anastomosis.
5680	Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Status post - Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
5690	Status post - Bilateral bidirectional cavopulmonary anastomosis (BBD CPA) (bilateral bidirectional Glenn)	Status post - Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
5700	Status post - HemiFontan	Status post - A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
6330	Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
6130	Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction	
5710	Status post - Palliation, Other	Status post - Any other palliative procedure not specifically listed.
6360	Status post - ECMO cannulation	
6370	Status post - ECMO decannulation	
5910	Status post - ECMO procedure	Status post - Any ECMO procedure (cannulation, decannulation, etc.).
5900	Status post - Intraaortic balloon pump (IABP) insertion	Status post - Insertion of intraaortic balloon pump by any technique.

5920	Status post - Right/left heart assist device procedure	Status post - Any right, left, or biventricular assist device procedure (placement, removal etc.).
6390	Status post - VAD explantation	
6380	Status post - VAD implantation	
6420	Status post - Echocardiography procedure, Sedated transesophageal echocardiogram	
6430	Status post - Echocardiography procedure, Sedated transthoracic echocardiogram	
6435	Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	
6440	Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
6450	Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
6460	Status post - Radiology procedure on cardiac patient, Diagnostic radiology	
6470	Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
6490	Status post - Interventional radiology procedure on cardiac patient	
5720	Status post - Aneurysm, Ventricular, Right, Repair	Status post - Repair of right ventricular aneurysm, any technique.
5730	Status post - Aneurysm, Ventricular, Left, Repair	Status post - Repair of left ventricular aneurysm, any technique.
5740	Status post - Aneurysm, Pulmonary artery, Repair	Status post - Repair of pulmonary artery aneurysm, any technique.

5760	Status post - Cardiac tumor resection	Status post - Resection of cardiac tumor, any type.
5780	Status post - Pulmonary AV fistula repair/occlusion	Status post - Repair or occlusion of a pulmonary arteriovenous fistula.
5790	Status post - Ligation, Pulmonary artery	Status post - Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus	Status post - Acute pulmonary embolism (clot) removal, through catheter or surgery.
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus	Status post - Chronic pulmonary embolism (clot) removal, through catheter or surgery.
5810	Status post - Pleural drainage procedure	Status post - Pleural drainage procedure via thoracentesis, tube thoracostomy, or open surgical drainage.
5820	Status post - Pleural procedure, Other	Status post - Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
5830	Status post - Ligation, Thoracic duct	Status post - Ligation of the thoracic duct; most commonly for persistent chylothorax.
5840	Status post - Decortication	Status post - Decortication of the lung by any technique.
5850	Status post - Esophageal procedure	Status post - Any procedure performed on the esophagus.
5860	Status post - Mediastinal procedure	Status post - Any non-cardiovascular mediastinal procedure not otherwise listed.
5870	Status post - Bronchoscopy	Status post - Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
5880	Status post - Diaphragm plication	Status post - Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
5890	Status post - Diaphragm procedure, Other	Status post - Any diaphragm procedure not specifically listed.
5930	Status post - VATS (video-assisted thoracoscopic surgery)	Status post - Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
5940	Status post - Minimally invasive procedure	Status post - Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
5950	Status post - Bypass for noncardiac lesion	Status post - Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the

		tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
5960	Status post - Delayed sternal closure	Status post - Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
5970	Status post - Mediastinal exploration	Status post - Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
5980	Status post - Sternotomy wound drainage	Status post - Drainage of the sternotomy wound.
5990	Status post - Thoracotomy, Other	Status post - Any procedure performed through a thoracotomy incision not otherwise listed.
6000	Status post - Cardiotomy, Other	Status post - Any procedure involving an incision in the heart that is not otherwise listed.
6010	Status post - Cardiac procedure, Other	Status post - Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
6020	Status post - Thoracic and/or mediastinal procedure, Other	Status post - Any thoracic and/or mediastinal procedure not otherwise listed.
6030	Status post - Peripheral vascular procedure, Other	Status post - Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
6040	Status post - Miscellaneous procedure, Other	Status post - Any miscellaneous procedure not otherwise listed.
6050	Status post - Organ procurement	Status post - Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
11777	Status post - Other procedure	Status post - Any procedure on any organ system not otherwise listed.

Long Name: Other Card-Congenital Diagnosis 3 *SeqNo:* 5330
Short Name: **OCarCongDiag3** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the third of the three most significant congenital diagnoses.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Other Card-Congenital *Format:* Text (categorical values specified by STS)
ParentShortName: OCarCong *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u> <u>Value:</u>	<u>Definition:</u>
10 PFO	Small interatrial communication in the region of the foramen ovale characterized by no deficiency of the septum primum and a normal limbus with no deficiency of the septum secundum.
20 ASD, Secundum	An ASD confined to the region of the fossa ovalis; its most common etiology is a deficiency of the septum primum, but deficiency of the limbus or septum secundum may also contribute.
30 ASD, Sinus venosus	Indicate if the patient has the diagnosis of "ASD, Sinus venosus". An "ASD, Sinus venosus" is defined as a defect with a vena cava or pulmonary vein (or veins) that overrides the atrial septum or the superior interatrial fold (septum secundum) producing an interatrial or anomalous venoatrial communication. Although the term sinus venosus atrial septal defect is commonly used, the lesion is more properly termed a sinus venosus communication because, while it functions as an interatrial communication, this lesion is not a defect of the true atrial septum.
40 ASD, Coronary sinus	Deficiency of the wall (sinus septum) separating the left atrium from the coronary sinus, often allowing blood to shunt from the left atrium to the right atrium via the coronary sinus ostium. May or may not be associated with a persistent left superior vena cava.
50 ASD, Common atrium (single atrium)	Complete absence of the interatrial septum. "Single atrium" is applied to defects with no associated malformation of the atrioventricular valves. "Common atrium" is applied to defects with associated malformation of the atrioventricular valves.
71 VSD, Type 1 (Subarterial) (Supracristal) (Conal septal	A VSD that lies beneath the semilunar valve(s) in the conal or outlet septum.

	defect) (Infundibular)	
73	VSD, Type 2 (Perimembranous) (Paramembranous) (Conoventricular)	A VSD that is confluent with and involves the membranous septum and is bordered by an atrioventricular valve, not including type 3 VSDs.
75	VSD, Type 3 (Inlet) (AV canal type)	A VSD that involves the inlet of the right ventricular septum immediately inferior to the AV valve apparatus.
77	VSD, Type 4 (Muscular)	A VSD completely surrounded by muscle.
79	VSD, Type: Gerbode type (LV-RA communication)	A rare form of VSD in which the defect is at the membranous septum; the communication is between the left ventricle and right atrium.
80	VSD, Multiple	More than one VSD exists. Each individual VSD may be coded separately to specify the individual VSD types.
100	AVC (AVSD), Complete (CAVSD)	Indicate if the patient has the diagnosis of "AVC (AVSD), Complete (CAVSD)". An "AVC (AVSD), Complete (CAVSD)" is a "complete atrioventricular canal" or a "complete atrioventricular septal defect" and occurs in a heart with the phenotypic feature of a common atrioventricular junction. An "AVC (AVSD), Complete (CAVSD)" is defined as an AVC with a common AV valve and both a defect in the atrial septum just above the AV valve (ostium primum ASD [a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve]) and a defect in the ventricular septum just below the AV valve. The AV valve is one valve that bridges both the right and left sides of the heart. Balanced AVC is an AVC with two essentially appropriately sized ventricles. Unbalanced AVC is an AVC defect with two ventricles in which one ventricle is inappropriately small. Such a patient may be thought to be a candidate for biventricular repair, or, alternatively, may be managed as having a functionally univentricular heart. AVC lesions with unbalanced ventricles so severe as to preclude biventricular repair should be classified as single ventricles. Rastelli type A: The common superior (anterior) bridging leaflet is effectively split in two at the septum. The left superior (anterior) leaflet is entirely over the left ventricle and the right superior (anterior) leaflet is similarly entirely over the right ventricle. The division of the common superior (anterior) bridging leaflet into left and right components is caused by extensive attachment of the superior (anterior) bridging leaflet to the crest of the ventricular septum by chordae tendineae. Rastelli type B: Rare, involves anomalous papillary muscle attachment from the right side of the ventricular septum to the left side of the common superior (anterior) bridging leaflet. Rastelli type C: Marked bridging of the ventricular septum by the superior (anterior) bridging leaflet, which floats freely (often termed a "free-floater") over the

		ventricular septum without chordal attachment to the crest of the ventricular septum.
110	AVC (AVSD), Intermediate (transitional)	An AVC with two distinct left and right AV valve orifices but also with both an ASD just above and a VSD just below the AV valves. While these AV valves in the intermediate form do form two separate orifices they remain abnormal valves. The VSD is often restrictive.
120	AVC (AVSD), Partial (incomplete) (PAVSD) (ASD, primum)	An AVC with an ostium primum ASD (a usually crescent-shaped ASD in the inferior (posterior) portion of the atrial septum just above the AV valve) and varying degrees of malformation of the left AV valve leading to varying degrees of left AV valve regurgitation. No VSD is present.
140	AP window (aortopulmonary window)	Indicate if the patient has the diagnosis of “AP window (aortopulmonary window)”. An “AP window (aortopulmonary window)” is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code “Interrupted aortic arch + AP window (aortopulmonary window)”, and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.)
150	Pulmonary artery origin from ascending aorta (hemitruncus)	One pulmonary artery arises from the ascending aorta and the other pulmonary artery arises from the right ventricle. DOES NOT include origin of the right or left pulmonary artery from the innominate artery or the aortic arch via a patent ductus arteriosus or collateral artery.
160	Truncus arteriosus	Indicate if the patient has the diagnosis of “Truncus

- arteriosus”. A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. Often, the infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. In such instances, there may be no ventricular septal defect or a very small ventricular septal defect, in which case the left ventricle and mitral valve may be extremely hypoplastic.
- 170 Truncal valve insufficiency Functional abnormality - insufficiency - of the truncal valve. May be further subdivided into grade of insufficiency (I, II, III, IV or mild, moderate, severe).
- 2010 Truncus arteriosus + Interrupted aortic arch Indicate if the patient has the diagnosis of “Truncus arteriosus + Interrupted aortic arch”. {A truncus arteriosus is also known as a common arterial trunk and is defined as a heart in which a single arterial trunk arises from the heart, giving origin to the coronary arteries, the pulmonary arteries, and the systemic arterial circulation. In the majority of instances there is a ventricular septal defect and a single semilunar valve which may contain two, three, four, or more leaflets and is occasionally dysplastic. The infundibular septum is virtually absent superiorly. In most instances the truncal valve overrides the true interventricular septum (and thus both ventricles), but very rarely the truncal valve may override the right ventricle entirely. If in such case there is no ventricular septal defect, then the left ventricle and mitral valve may be extremely hypoplastic.} {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.}
- 180 Partial anomalous pulmonary venous connection (PAPVC) Some, but not all of the pulmonary veins connect to the right atrium or to one or more of its venous tributaries. This definition excludes sinus venosus defects with normally connected but abnormally draining pulmonary veins (the pulmonary veins may drain abnormally into the right atrium via the atrial septal defect).
- 190 Partial anomalous pulmonary The right pulmonary vein(s) connect anomalously to the

	venous connection (PAPVC), scimitar	inferior vena cava or to the right atrium at the insertion of the inferior vena cava. The descending vertical vein resembles a scimitar (Turkish sword) on frontal chest x-ray. Frequently associated with: hypoplasia of the right lung with bronchial anomalies; dextroposition and/or dextrorotation of the heart; hypoplasia of the right pulmonary artery; and anomalous subdiaphragmatic systemic arterial supply to the lower lobe of the right lung directly from the aorta or its main branches.
200	Total anomalous pulmonary venous connection (TAPVC), Type 1 (supracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 1 (supracardiac) TAPVC, the anomalous connection is at the supracardiac level and can be obstructed or nonobstructed.
210	Total anomalous pulmonary venous connection (TAPVC), Type 2 (cardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 2 (cardiac) TAPVC, the anomalous connection is to the heart, either to the right atrium directly or to the coronary sinus. Most patients with type 2 TAPVC are nonobstructed.
220	Total anomalous pulmonary venous connection (TAPVC), Type 3 (infracardiac)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 3 (infracardiac) TAPVC, the anomalous connection is at the infracardiac level (below the diaphragm), with the pulmonary venous return entering the right atrium ultimately via the inferior vena cava. In the vast majority of patients infracardiac TAPVC is obstructed.
230	Total anomalous pulmonary venous connection (TAPVC), Type 4 (mixed)	All of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium. In Type 4 (mixed) TAPVC, the anomalous connection is at two or more of the above levels (supracardiac, cardiac, infracardiac) and can be obstructed or nonobstructed.
250	Cor triatriatum	In the classic form of cor triatriatum a membrane divides the left atrium (LA) into a posterior accessory chamber that receives the pulmonary veins and an anterior chamber (LA) that communicates with the mitral valve. In differentiating cor triatriatum from supralvalvar mitral ring, in cor triatriatum the posterior compartment contains the pulmonary veins while the anterior contains the left atrial appendage and the mitral valve orifice; in supralvalvar mitral ring, the anterior compartment contains only the mitral valve orifice. Cor triatriatum dexter (prominent venous valve producing

- obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
- 260 Pulmonary venous stenosis Any pathologic narrowing of one or more pulmonary veins. Can be further subdivided by etiology (congenital, acquired-postoperative, acquired-nonpostoperative) and extent of stenosis (diffusely hypoplastic, long segment focal/tubular stenosis, discrete stenosis).
- 270 Systemic venous anomaly Anomalies of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from one or more anomalies of origin, duplication, course, or connection. Examples include abnormal or absent right SVC with LSVC, bilateral SVC, interrupted right or left IVC, azygos continuation of IVC, and anomalies of hepatic drainage. Bilateral SVC may have, among other configurations: 1) RSVC draining to the RA and the LSVC to the LA with completely unroofed coronary sinus, 2) RSVC draining to the RA and LSVC to the coronary sinus which drains (normally) into the RA, or 3) RSVC to the coronary sinus which drains (abnormally) into the LA and LSVC to LA. Anomalies of the inferior vena caval system include, among others: 1) left IVC to LA, 2) biatrial drainage, or 3) interrupted IVC (left or right) with azygos continuation to an LSVC or RSVC.
- 280 Systemic venous obstruction Obstruction of the systemic venous system (superior vena cava (SVC), inferior vena cava (IVC), brachiocephalic veins (often the innominate vein), azygos vein, coronary sinus, levo-atrial cardinal vein) arising from congenital or acquired stenosis or occlusion. Cor triatriatum dexter (prominent venous valve producing obstruction of the IVC and tricuspid valve) is to be coded as a systemic venous obstruction, not as a form of cor triatriatum.
- 290 TOF Indicate if the patient has the diagnosis of “TOF”. Only use this diagnosis if it is NOT known if the patient has one of the following four more specific diagnoses: (1). “TOF, Pulmonary stenosis”, (2). “TOF, AVC (AVSD)”, (3). “TOF, Absent pulmonary valve”, (4). “Pulmonary atresia, VSD (Including TOF, PA)”, or (5). “Pulmonary atresia, VSD-MAPCA (pseudotruncus)”. {“TOF” is “Tetralogy of Fallot” and is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a

ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy.} (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as “VSD, Type 4 (Muscular)”. Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery; additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")

2140 TOF, Pulmonary stenosis

Indicate if the patient has the diagnosis of “TOF, Pulmonary stenosis”. Use this diagnosis if the patient has tetralogy of Fallot and pulmonary stenosis. Do not use this diagnosis if the patient has tetralogy of Fallot and pulmonary atresia. Do not use this diagnosis if the patient has tetralogy of Fallot and absent pulmonary valve. Do not use this diagnosis if the patient has tetralogy of Fallot and atrioventricular canal. {Tetralogy of Fallot is defined as a group of malformations with biventricular atrioventricular alignments or connections characterized by anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing or atresia of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta. Hearts with tetralogy of Fallot will always have a ventricular septal defect, narrowing or atresia of the pulmonary outflow, and aortic override; hearts with tetralogy of Fallot will most often have right ventricular hypertrophy. (An additional, often muscular [Type 4] VSD may be seen with TOF and should be coded separately as a secondary diagnosis as “VSD, Type 4 (Muscular)”. Pulmonary arteries may be diminutive or there may be an absent left or right pulmonary artery;

- additional coding for pulmonary artery and/or branch pulmonary artery stenoses may be found under RVOT obstruction. Abnormal coronary artery distribution may also be associated with tetralogy of Fallot and may be coded separately under coronary artery anomalies. The presence of associated anomalies such as additional VSD, atrial septal defect, right aortic arch, left superior vena cava, and coronary artery anomalies must be subspecified as an additional or secondary diagnosis under the primary TOF diagnosis. TOF with absent pulmonary valve or TOF with associated complete atrioventricular canal are NOT to be secondary diagnoses under TOF - they are separate entities and should be coded as such. Controversy surrounds the differentiation between TOF and double outlet right ventricle [DORV]; in the nomenclature used here, DORV is defined as a type of ventriculoarterial connection in which both great vessels arise predominantly from the right ventricle. TOF with pulmonary atresia is to be coded under "Pulmonary atresia-VSD.")}
- 300 TOF, AVC (AVSD) TOF with complete common atrioventricular canal defect is a rare variant of common atrioventricular canal defect with the associated conotruncal abnormality of TOF. The anatomy of the endocardial cushion defect is that of Rastelli type C in almost all cases.
- 310 TOF, Absent pulmonary valve Indicate if the patient has the diagnosis of "TOF, Absent pulmonary valve". "TOF, Absent pulmonary valve" is "Tetralogy of Fallot with Absent pulmonary valve" and is defined as a malformation with all of the morphologic characteristics of tetralogy of Fallot (anterosuperior deviation of the conal or outlet septum or its fibrous remnant, narrowing of the pulmonary outflow, a ventricular septal defect of the malalignment type, and biventricular origin of the aorta), in which the ventriculo-arterial junction of the right ventricle with the main pulmonary artery features an atypical valve with rudimentary cusps that lack the anatomical semi-lunar features of normal valve cusps and which functionally do not achieve central coaptation. The physiologic consequence is usually a combination of variable degrees of both stenosis and regurgitation of the pulmonary valve. A developmental accompaniment of this anatomy and physiology is dilatation of the main pulmonary artery and central right and left pulmonary arteries, which when extreme, is associated with abnormal arborization of lobar and segmental pulmonary artery branches and with compression of the trachea and mainstem bronchi. One theory holds that absence of the arterial duct or ductal ligament (which is a nearly constant finding in cases of tetralogy of Fallot with absent pulmonary valve) in combination with pulmonary valve stenosis and regurgitation, comprise

- the physiologic conditions which predispose to central pulmonary artery dilatation during fetal development. (Tetralogy of Fallot with Absent Pulmonary Valve Syndrome is a term frequently used to describe the clinical presentation when it features both circulatory alterations and respiratory distress secondary to airway compression.)
- 320 Pulmonary atresia
Pulmonary atresia defects which do not readily fall into pulmonary atresia-intact ventricular septum or pulmonary atresia-VSD (with or without MAPCAs) categories. These may include complex lesions in which pulmonary atresia is a secondary diagnosis, for example, complex single ventricle malformations with associated pulmonary atresia.
- 330 Pulmonary atresia, IVS
Pulmonary atresia (PA) and intact ventricular septum (IVS) is a duct-dependent congenital malformation that forms a spectrum of lesions including atresia of the pulmonary valve, a varying degree of right ventricle and tricuspid valve hypoplasia, and anomalies of the coronary circulation. An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis. Associated Ebstein's anomaly of the tricuspid valve can be present; the tricuspid diameter is enlarged and the prognosis is poor.
- 340 Pulmonary atresia, VSD
(Including TOF, PA)
Pulmonary atresia (PA) and ventricular septal defect (VSD) is a heterogeneous group of congenital cardiac malformations in which there is lack of luminal continuity and absence of blood flow from either ventricle (in cases with ventriculo-arterial discordance) and the pulmonary artery, in a biventricular heart that has an opening or a hole in the interventricular septum (VSD). The malformation forms a spectrum of lesions including tetralogy of Fallot with pulmonary atresia. Tetralogy of Fallot with PA is a specific type of PA-VSD where the intracardiac malformation is more accurately defined (extreme underdevelopment of the RV infundibulum with marked anterior and leftward displacement of the infundibular septum often fused with the anterior wall of the RV resulting in complete obstruction of blood flow into the pulmonary artery and associated with a large outlet, subaortic ventricular septal defect). In the vast majority of cases of PA-VSD the intracardiac anatomy is that of TOF. The pulmonary circulation in PA-VSD is variable in terms of origin of blood flow, presence or absence of native pulmonary arteries, presence or absence of major aortopulmonary collateral arteries (MAPCA(s)), and distal distribution (pulmonary parenchymal segment arborization) abnormalities. Native pulmonary arteries may be present or absent. If MAPCAs are present this code should not be used; instead, Pulmonary atresia, VSD-

- 350 Pulmonary atresia, VSD-MAPCA (pseudotruncus) MAPCA (pseudotruncus) should be used. MAPCA(s) are large and distinct arteries, highly variable in number, that usually arise from the descending thoracic aorta, but uncommonly may originate from the aortic arch or the subclavian, carotid or even the coronary arteries. MAPCA(s) may be associated with present or absent native pulmonary arteries. If present, the native pulmonary arteries may be hypoplastic, and either confluent or nonconfluent. Systemic pulmonary collateral arteries have been categorized into 3 types based on their site of origin and the way they connect to the pulmonary circulation: direct aortopulmonary collaterals, indirect aortopulmonary collaterals, and true bronchial arteries. Only the first two should be considered MAPCA(s). If MAPCA(s) are associated with PA-VSD or TOF, PA this code should be used.
- 360 MAPCA(s) (major aortopulmonary collateral[s]) (without PA-VSD) Rarely MAPCA(s) may occur in patents who do not have PA-VSD, but have severe pulmonary stenosis. The intracardiac anatomy in patients who have MAPCA(s) without PA should be specifically coded in each case as well.
- 370 Ebstein's anomaly Indicate if the patient has the diagnosis of "Ebstein's anomaly". Ebstein's anomaly is a malformation of the tricuspid valve and right ventricle that is characterized by a spectrum of several features: (1) incomplete delamination of tricuspid valve leaflets from the myocardium of the right ventricle; (2) downward (apical) displacement of the functional annulus; (3) dilation of the "atrialized" portion of the right ventricle with variable degrees of hypertrophy and thinning of the wall; (4) redundancy, fenestrations, and tethering of the anterior leaflets; and (5) dilation of the right atrioventricular junction (the true tricuspid annulus). These anatomical and functional abnormalities cause tricuspid regurgitation (and rarely tricuspid stenosis) that results in right atrial and right ventricular dilatation and atrial and ventricular arrhythmias. With increasing degrees of anatomic severity of malformation, the fibrous transformation of leaflets from their muscular precursors remains incomplete, with the septal leaflet being most severely involved, the posterior leaflet less severely involved, and the anterior leaflet usually the least severely involved. Associated cardiac anomalies include an interatrial communication, the presence of accessory conduction pathways often associated with Wolff-Parkinson-White syndrome, and dilation of the right atrium and right ventricle in patients with severe Ebstein's anomaly. (Varying degrees of right ventricular outflow tract obstruction may be present, including pulmonary atresia in some cases. Such cases of Ebstein's anomaly with pulmonary atresia should be

		<p>coded with a Primary Diagnosis of “Ebstein’s anomaly” , and a Secondary Diagnosis of “Pulmonary atresia”.) (Some patients with atrioventricular discordance and ventriculoarterial discordance in situs solitus [congenitally corrected transposition] have an Ebstein-like deformity of the left-sided morphologically tricuspid valve. The nature of the displacement of the septal and posterior leaflets is similar to that in right-sided Ebstein's anomaly in patients with atrioventricular concordance and ventriculoarterial concordance in situs solitus. These patients with “Congenitally corrected TGA” and an Ebstein-like deformity of the left-sided morphologically tricuspid valve should be coded with a Primary Diagnosis of “Congenitally corrected TGA”, and a Secondary Diagnosis of “Ebstein's anomaly”.)</p>
380	Tricuspid regurgitation, non-Ebstein's related	<p>Non-Ebstein's tricuspid regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, absent papillary muscle/chordae) or acquired (post cardiac surgery or secondary to rheumatic fever, endocarditis, trauma, tumor, cardiomyopathy, iatrogenic or other causes).</p>
390	Tricuspid stenosis	<p>Tricuspid stenosis may be due to congenital factors (valvular hypoplasia, abnormal subvalvar apparatus, double-orifice valve, parachute deformity) or acquired (post cardiac surgery or secondary to carcinoid, rheumatic fever, tumor, systemic disease, iatrogenic, or other causes).</p>
400	Tricuspid regurgitation and tricuspid stenosis	<p>Tricuspid regurgitation present with tricuspid stenosis may be due to congenital factors or acquired.</p>
410	Tricuspid valve, Other	<p>Tricuspid valve pathology not otherwise specified in diagnosis definitions 370, 380, 390 and 400.</p>
420	Pulmonary stenosis, Valvar	<p>Pulmonary stenosis, Valvar ranges from critical neonatal pulmonic valve stenosis with hypoplasia of the right ventricle to valvar pulmonary stenosis in the infant, child, or adult, usually better tolerated but potentially associated with infundibular stenosis. Pulmonary branch hypoplasia can be associated. Only 10% of neonates with Pulmonary stenosis, Valvar with intact ventricular septum have RV-to-coronary artery fistula(s). An RV dependent coronary artery circulation is present when coronary artery fistulas (coronary sinusoids) are associated with a proximal coronary artery stenosis; this occurs in only 2% of neonates with Pulmonary stenosis, Valvar with IVS.</p>
430	Pulmonary artery stenosis (hypoplasia), Main (trunk)	<p>Indicate if the patient has the diagnosis of “Pulmonary artery stenosis (hypoplasia), Main (trunk)”. “Pulmonary artery stenosis (hypoplasia), Main (trunk)” is defined as a congenital or acquired anomaly with pulmonary trunk (main pulmonary artery) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Since the</p>

- narrowing is distal to the pulmonic valve, it may also be known as supra-valvar pulmonary stenosis.
- 440 Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation) Indicate if the patient has the diagnosis of “Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)”. “Pulmonary artery stenosis, Branch, Central (within the hilar bifurcation)” is defined as a congenital or acquired anomaly with central pulmonary artery branch (within the hilar bifurcation involving the right or left pulmonary artery, or both) narrowing or hypoplasia. The stenosis or hypoplasia may be isolated or associated with other cardiac lesions. Coarctation of the pulmonary artery is related to abnormal extension of the ductus arteriosus into a pulmonary branch, more frequently the left branch.
- 450 Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation) Indicate if the patient has the diagnosis of “Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)”. “Pulmonary artery stenosis, Branch, Peripheral (at or beyond the hilar bifurcation)” is defined as a congenital or acquired anomaly with peripheral pulmonary artery narrowing or hypoplasia (at or beyond the hilar bifurcation). The stenosis or hypoplasia may be isolated or associated with other cardiac lesions.
- 470 Pulmonary artery, Discontinuous Indicate if the patient has the diagnosis of “Pulmonary artery, Discontinuous”. Pulmonary artery, Discontinuous” is defined as a congenital or acquired anomaly with discontinuity between the branch pulmonary arteries or between a branch pulmonary artery and the main pulmonary artery trunk.
- 490 Pulmonary stenosis, Subvalvar Subvalvar (infundibular) pulmonary stenosis is a narrowing of the outflow tract of the right ventricle below the pulmonic valve. It may be due to a localized fibrous diaphragm just below the valve, an obstructing muscle bundle or to a long narrow fibromuscular channel.
- 500 DCRV The double chambered right ventricle is characterized by a low infundibular (subvalvar) stenosis rather than the rare isolated infundibular stenosis that develops more superiorly in the infundibulum, and is often associated with one or several closing VSDs. In some cases, the VSD is already closed. The stenosis creates two chambers in the RV, one inferior including the inlet and trabecular portions of the RV and one superior including the infundibulum.
- 510 Pulmonary valve, Other Other anomalies of the pulmonary valve may be listed here including but not restricted to absent pulmonary valve.
- 530 Pulmonary insufficiency Pulmonary valve insufficiency or regurgitation may be due to congenital factors (primary annular dilation, prolapse, leaflet underdevelopment, etc.) or acquired (for example, post cardiac surgery for repair of tetralogy

- of Fallot, etc.).
- 540 Pulmonary insufficiency and pulmonary stenosis Pulmonary valve insufficiency and pulmonary stenosis beyond the neonatal period, in infancy and childhood, may be secondary to leaflet tissue that has become thickened and myxomatous. Retraction of the commissure attachment frequently creates an associated supra-avalvular stenosis.
- 2130 Shunt failure Indicate if the patient has the diagnosis of “Shunt failure”. This diagnostic subgroup includes failure of any of a variety of shunts (“Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)”, “Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)”, “Shunt, Systemic to pulmonary, Other”, and “Sano Shunt”), secondary to any of the following etiologies: shunt thrombosis, shunt occlusion, shunt stenosis, shunt obstruction, and shunt outgrowth. This diagnosis (“Shunt failure”) would be the primary diagnosis in a patient with, for example, “Hypoplastic left heart syndrome (HLHS)” who underwent a “Norwood procedure” with a “Modified Blalock-Taussig Shunt” and now requires reoperation for thrombosis of the “Modified Blalock-Taussig Shunt”. The underlying or fundamental diagnosis in this patient is “Hypoplastic left heart syndrome (HLHS)”, but the primary diagnosis for the operation to be performed to treat the thrombosis of the “Modified Blalock-Taussig Shunt” would be “Shunt failure”.
- Please note that the choice “2130 Shunt failure” does not include “520 Conduit failure”.
- 520 Conduit failure Indicate if the patient has the diagnosis of “Conduit failure”. This diagnostic subgroup includes failure of any of a variety of conduits (ventricular [right or left]-to-PA conduits, as well as a variety of other types of conduits [ventricular {right or left}-to-aorta, RA-to-RV, etc.]), secondary to any of the following etiologies: conduit outgrowth, obstruction, stenosis, insufficiency, or insufficiency and stenosis. This diagnosis (“Conduit failure”) would be the primary diagnosis in a patient with, for example, “Truncus arteriosus” repaired in infancy who years later is hospitalized because of conduit stenosis/insufficiency. The underlying or fundamental diagnosis in this patient is “Truncus arteriosus”, but the primary diagnosis for the operation to be performed during the hospitalization (in this case, “Conduit reoperation”) would be “Conduit failure”.
- Please note that the choice “520 Conduit failure” does not include “2130 Shunt failure”.
- 550 Aortic stenosis, Subvalvar Subaortic obstruction can be caused by different lesions: subaortic membrane or tunnel, accessory mitral valve tissue, abnormal insertion of the mitral anterior

- leaflet to the ventricular septum, deviation of the outlet septum (seen in coarctation of the aorta and interrupted aortic arch), or a restrictive bulboventricular foramen in single ventricle complexes. The Shone complex consists of subvalvar aortic stenosis in association with supralvalvar mitral ring, parachute mitral valve, and coarctation of aorta. Subvalvar aortic stenosis may be categorized into two types: localized subvalvar aortic stenosis, which consists of a fibrous or fibromuscular ridge, and diffuse tunnel subvalvar aortic stenosis, in which circumferential narrowing commences at the annular level and extends downward for 1-3 cm. Idiopathic hypertrophic subaortic stenosis (IHSS) is also known as hypertrophic obstructive cardiomyopathy (HOCM), and is characterized by a primary hypertrophy of the myocardium. The obstructive forms involve different degrees of dynamic subvalvar aortic obstruction from a thickened ventricular wall and anterior motion of the mitral valve. Definitive nomenclature and therapeutic options for IHSS are listed under cardiomyopathy.
- 560 Aortic stenosis, Valvar
- Valvar aortic stenosis may be congenital or acquired. In its congenital form there are two types: critical (infantile), seen in the newborn in whom systemic perfusion depends on a patent ductus arteriosus, and noncritical, seen in infancy or later. Acquired valvar stenosis may be seen after as a result of rheumatic valvar disease, or from stenotic changes of an aortic valve prosthesis. Congenital valvar stenosis may result: (1) from complete fusion of commissures (acommissural) that results in a dome-shaped valve with a pinpoint opening (seen most commonly in infants with critical aortic valve stenosis); (2) from a unicommissural valve with one defined commissure and eccentric orifice (often with two raphes radiating from the ostium indicating underdeveloped commissures of a tricuspid aortic valve); (3) from a bicuspid aortic valve, with leaflets that can be equal in size or discrepant, and in left-right or anterior-posterior position; and finally (4) from a dysplastic tricuspid valve, which may have a gelatinous appearance with thick rarely equal in size leaflets, often obscuring the commissures. The dysplastic, tricuspid or bicuspid form of aortic valve deformity may not be initially obstructive but may become stenotic later in life due to leaflet thickening and calcification.
- 570 Aortic stenosis, Supralvalvar
- Congenital supralvalvar aortic stenosis is described as three forms: an hourglass deformity, a fibrous membrane, and a diffuse narrowing of the ascending aorta. The disease can be inherited as an autosomal dominant trait or part of Williams-Beuren syndrome in association with mental retardation, elfin facies, failure to thrive, and occasionally infantile hypercalcemia.

- Supravalvar aortic stenosis may involve the coronary artery ostia, and the aortic leaflets may be tethered. The coronary arteries can become tortuous and dilated due to elevated pressures and early atherosclerosis may ensue. Supravalvar aortic stenosis may also be acquired: (1) after a neoaortic reconstruction such as arterial switch, Ross operation, or Norwood procedure; (2) at a suture line from a previous aortotomy or cannulation; and (3) from a narrowed conduit.
- 590 Aortic valve atresia
- Aortic valve atresia will most often be coded under the Hypoplastic left heart syndrome/complex diagnostic codes since it most often occurs as part of a spectrum of cardiac malformations. However, there is a small subset of patients with aortic valve atresia who have a well-developed left ventricle and mitral valve and a large VSD (nonrestrictive or restrictive). The diagnostic code "Aortic valve atresia" enables users to report those patients with aortic valve atresia and a well-developed systemic ventricle without recourse to either a hypoplastic left heart syndrome/complex diagnosis or a single ventricle diagnosis.
- 600 Aortic insufficiency
- Congenital aortic regurgitation/insufficiency is rare as an isolated entity. There are rare reports of congenital malformation of the aortic valve that result in aortic insufficiency shortly after birth from an absent or underdeveloped aortic valve cusp. Aortic insufficiency is more commonly seen with other associated cardiac anomalies: (1) in stenotic aortic valves (commonly stenotic congenital bicuspid aortic valves) with some degree of aortic regurgitation due to aortic leaflet abnormality; (2) in association with a VSD (especially in supravalvar or conal type I VSD, more commonly seen in Asian populations); (3) secondary to aortic-left ventricular tunnel; (4) secondary to tethering or retraction of aortic valve leaflets in cases of supravalvar aortic stenosis that may involve the aortic valve; and similarly (5) secondary to encroachment on an aortic cusp by a subaortic membrane; or (6) turbulence caused by a stenotic jet can create progressive aortic regurgitation. Aortic insufficiency may also result from: (1) post-procedure such as closed or open valvotomy or aortic valve repair, VSD closure, balloon valvotomy, or diagnostic catheterization; (2) in the neo-aorta post arterial switch, pulmonary autograft (Ross) procedure, homograft placement, Norwood procedure, or Damus-Kaye-Stansel procedure; (3) as a result of endocarditis secondary to perforated or prolapsed leaflets or annular dehiscence; (4) secondary to annulo-aortic ectasia with prolapsed or noncoapting leaflets; (5) secondary to trauma, blunt or penetrating; or (6) as a result of aortitis, bacterial, viral or autoimmune. Aortic regurgitation secondary to prosthetic failure should be coded first as either conduit failure or prosthetic valve

		failure, as applicable, and secondarily as aortic regurgitation secondary to prosthetic failure (perivalvar or due to structural failure). The underlying fundamental diagnosis that led to the initial conduit or valve prosthesis placement should also be described.
610	Aortic insufficiency and aortic stenosis	Aortic insufficiency is often seen in association with stenotic aortic valve, commonly the stenotic congenital bicuspid aortic valve. The degree of aortic regurgitation is due to the severity of the aortic leaflet abnormality.
620	Aortic valve, Other	This diagnostic subgroup may be used to delineate aortic valve cusp number (unicuspid, bicuspid, tricuspid, more than three cusps), commissural fusion (normal, partially fused, completely fused), and valve leaflet (normal, thickened, dysplastic, calcified, gelatinous), annulus (normal, hypoplastic, calcified), or sinus description (normal, dilated). Note that any extensive descriptors chosen within those made available by a vendor will be converted, at harvest, to Aortic valve, Other.
630	Sinus of Valsalva aneurysm	The sinus of Valsalva is defined as that portion of the aortic root between the aortic root annulus and the sinotubular ridge. A congenital sinus of Valsalva aneurysm is a dilation usually of a single sinus of Valsalva. These most commonly originate from the right sinus (65%-85%), less commonly from the noncoronary sinus (10%-30%), and rarely from the left sinus (<5%). A true sinus of Valsalva aneurysm presents above the aortic annulus. The hierarchical coding system distinguishes between congenital versus acquired, ruptured versus nonruptured, sinus of origin, and chamber/site of penetration (right atrium, right ventricle, left atrium, left ventricle, pulmonary artery, pericardium). A nonruptured congenital sinus of Valsalva aneurysm may vary from a mild dilation of a single aortic sinus to an extensive windsock deformity. Rupture of a congenital sinus of Valsalva aneurysm into an adjacent chamber occurs most commonly between the ages of 15-30 years. Rupture may occur spontaneously, after trauma, after strenuous physical exertion, or from acute bacterial endocarditis. Congenital etiology is supported by the frequent association of sinus of Valsalva aneurysms with VSDs. Other disease processes are also associated with sinus of Valsalva aneurysm and include: syphilis, endocarditis, cystic medial necrosis, atherosclerosis, and trauma. Acquired sinus of Valsalva aneurysms more frequently involve multiple sinuses of Valsalva; when present in multiple form they are more appropriately classified as aneurysms of the aortic root.
640	LV to aorta tunnel	The aortico-left ventricular tunnel (LV-to-aorta tunnel) is an abnormal paravalvular (alongside or in the vicinity of a valve) communication between the aorta and left

- ventricle, commonly divided into 4 types: (1) type I, a simple tunnel with a slit-like opening at the aortic end and no aortic valve distortion; (2) type II, a large extracardiac aortic wall aneurysm of the tunnel with an oval opening at the aortic end, with or without ventricular distortion; (3) type III, intracardiac aneurysm of the septal portion of the tunnel, with or without right ventricular outflow obstruction; and (4) type IV, a combination of types II and III. Further differentiation within these types may be notation of right coronary artery arising from the wall of the tunnel. If a LV-to-aorta tunnel communicates with the right ventricle, many feel that the defect is really a ruptured sinus of Valsalva aneurysm.
- 650 Mitral stenosis, Supravalvar mitral ring
- Supravalvar mitral ring is formed by a circumferential ridge of tissue that is attached to the anterior mitral valve leaflet (also known as the aortic leaflet) slightly below its insertion on the annulus and to the atrium slightly above the attachment of the posterior mitral valve leaflet (also known as the mural leaflet). Depending on the diameter of the ring orifice, varying degrees of obstruction exist. The underlying valve is usually abnormal and frequently stenotic or hypoplastic. Supravalvar mitral ring is commonly associated with other stenotic lesions such as parachute or hammock valve (subvalvar stenosis), papillary muscle fusion (subvalvar stenosis), and double orifice mitral valve (valvar stenosis). Differentiation from cor triatriatum focuses on the compartments created by the supravalvar ring. In cor triatriatum the posterior compartment contains the pulmonary veins; the anterior contains the left atrial appendage and the mitral valve orifice. In supravalvar mitral ring, the posterior compartment contains the pulmonary veins and the left atrial appendage; the anterior compartment contains only the mitral valve orifice. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
- 660 Mitral stenosis, Valvar
- Valvar mitral stenosis may arise from congenital (annular and / or leaflet) or acquired causes, both surgical (after mitral valve repair or replacement or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia, myxomatous degeneration, trauma, or cardiomyopathy). Mitral valve annular hypoplasia is distinguished from severe mitral valve hypoplasia and mitral valve atresia, which are typically components of hypoplastic left heart syndrome. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the

		primary defect.
670	Mitral stenosis, Subvalvar	Congenital subvalvar mitral stenosis may be due to obstructive pathology of either the chordae tendineae and / or papillary muscles which support the valve leaflets. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
680	Mitral stenosis, Subvalvar, Parachute	In parachute mitral valve, all chordae are attached to a single papillary muscle originating from the posterior ventricular wall. When the interchordal spaces are partially obliterated valvar stenosis results. This defect also causes valvar insufficiency, most commonly due to a cleft leaflet, a poorly developed anterior leaflet, short chordae, or annular dilatation. This lesion is also part of Shone's anomaly, which consists of the parachute mitral valve, supra-annular mitral ring, subaortic stenosis, and coarctation of the aorta. When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
695	Mitral stenosis	Stenotic lesions of the mitral valve not otherwise specified in the diagnosis definitions 650, 660, 670, and 680.
700	Mitral regurgitation and mitral stenosis	Mitral regurgitation and mitral stenosis may arise from congenital or acquired causes or after cardiac surgery. Additional details to aid in coding specific components of the diagnosis are available in the individual mitral stenosis or mitral regurgitation field definitions. When coding multiple mitral valve lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
710	Mitral regurgitation	Mitral regurgitation may arise from congenital (at the annular, leaflet or subvalvar level) or acquired causes both surgical (after mitral valve repair or replacement, subaortic stenosis repair, atrioventricular canal repair, cardiac transplantation, or other cardiac surgery) and non-surgical (post rheumatic heart disease, infective endocarditis, ischemia (with chordal rupture or papillary muscle infarct), myxomatous degeneration including Barlow's syndrome, trauma, or cardiomyopathy). Congenital lesions at the annular level include annular dilatation or deformation (usually deformation is consequent to associated lesions). At the valve leaflet level, mitral regurgitation may be due to a cleft, hypoplasia or agenesis of leaflet(s), excessive leaflet tissue, or a double orifice valve. At the subvalvar level, mitral regurgitation may be secondary to chordae tendineae anomalies (agenesis, rupture, elongation, or

		shortening as in funnel valve), or to papillary muscle anomalies (hypoplasia or agenesis, shortening, elongation, single-parachute, or multiple-hammock valve). When coding multiple mitral valvar lesions the predominant defect causing the functional effect (regurgitation, stenosis, or regurgitation and stenosis) should be listed as the primary defect.
720	Mitral valve, Other	Mitral valve pathology not otherwise coded in diagnosis definitions 650 through 710.
730	Hypoplastic left heart syndrome (HLHS)	Hypoplastic left heart syndrome (HLHS) is a spectrum of cardiac malformations characterized by a severe underdevelopment of the left heart-aorta complex, consisting of aortic and/or mitral valve atresia, stenosis, or hypoplasia with marked hypoplasia or absence of the left ventricle, and hypoplasia of the ascending aorta and of the aortic arch with coarctation of the aorta. Hypoplastic left heart complex is a subset of patients at the favorable end of the spectrum of HLHS characterized by hypoplasia of the structures of the left heart-aorta complex, consisting of aortic and mitral valve hypoplasia without valve stenosis or atresia, hypoplasia of the left ventricle, hypoplasia of the left ventricular outflow tract, hypoplasia of the ascending aorta and of the aortic arch, with or without coarctation of the aorta.
2080	Shone's syndrome	Shone's syndrome is a syndrome of multilevel hypoplasia and obstruction of left sided cardiovascular structures including more than one of the following lesions: (1) supralvalvar ring of the left atrium, (2) a parachute deformity of the mitral valve, (3) subaortic stenosis, and (4) aortic coarctation. The syndrome is based on the original report from Shone [1] that was based on analysis of 8 autopsied cases and described the tendency of these four obstructive, or potentially obstructive, conditions to coexist. Only 2 of the 8 cases exhibited all four conditions, with the other cases exhibiting only two or three of the anomalies [2]. [1] Shone JD, Sellers RD, Anderson RG, Adams P, Lillehei CW, Edwards JE. The developmental complex of "parachute mitral valve", supralvalvar ring of left atrium, subaortic stenosis, and coarctation of the aorta. <i>Am J Cardiol</i> 1963; 11: 714–725. [2]. Tchervenkov CI, Jacobs JP, Weinberg PM, Aiello VD, Beland MJ, Colan SD, Elliott MJ, Franklin RC, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G. The nomenclature, definition and classification of hypoplastic left heart syndrome. <i>Cardiology in the Young</i> , 2006; 16(4): 339–368, August 2006.

Please note that the term "2080 Shone's syndrome" may be the "Fundamental Diagnosis" of a patient; however, the term "2080 Shone's syndrome" may not be the "

		Primary Diagnosis” of an operation. The term “2080 Shone’s syndrome” may be a “Secondary Diagnosis” of an operation.
740	Cardiomyopathy (including dilated, restrictive, and hypertrophic)	Cardiomyopathy is a term applied to a wide spectrum of cardiac diseases in which the predominant feature is poor myocardial function in the absence of any anatomic abnormalities. Cardiomyopathies can be divided into three relatively easily distinguishable entities: (1) dilated, characterized by ventricular dilatation and systolic dysfunction; (2) hypertrophic, characterized by physiologically inappropriate hypertrophy of the left ventricle; and (3) restrictive, characterized by diastolic dysfunction, with a presentation often identical to constrictive pericarditis. Also included in this diagnostic category are patients with a cardiomyopathy or syndrome confined to the right ventricle, for example: (1) arrhythmogenic right ventricular dysplasia; (2) Uhl's syndrome (hypoplasia of right ventricular myocardium, parchment heart); or (3) spongiform cardiomyopathy.
750	Cardiomyopathy, End-stage congenital heart disease	Myocardial abnormality in which there is systolic and/or diastolic dysfunction in the presence of structural congenital heart disease without any (or any further) surgically correctable lesions.
760	Pericardial effusion	Inflammatory stimulation of the pericardium that results in the accumulation of appreciable amounts of pericardial fluid (also known as effusive pericarditis). The effusion may be idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced).
770	Pericarditis	Inflammatory process of the pericardium that leads to either (1) effusive pericarditis with accumulation of appreciable amounts of pericardial fluid or (2) constrictive pericarditis that leads to pericardial thickening and compression of the cardiac chambers, ultimately with an associated significant reduction in cardiac function. Etiologies are varied and include idiopathic or acquired (e.g., postoperative, infectious, uremic, neoplastic, traumatic, drug-induced) pericarditis.
780	Pericardial disease, Other	A structural or functional abnormality of the visceral or parietal pericardium that may, or may not, have a significant impact on cardiac function. Included are absence or partial defects of the pericardium.
790	Single ventricle, DILV	Single morphologically left ventricle (smooth internal walls, lack chordal attachments of AV valves to the rudimentary septal surface) that receives both atrioventricular valves.
800	Single ventricle, DIRV	Single morphologically right ventricle (more heavily trabeculated, generally have chordal attachments of AV valve to the septal surfaces) that receives both atrioventricular valves.

810	Single ventricle, Mitral atresia	Single ventricle anomalies with mitral atresia. May also be associated with double outlet right ventricle, congenitally corrected transposition, pulmonary atresia, or pulmonary stenosis.
820	Single ventricle, Tricuspid atresia	Single ventricle anomalies with tricuspid atresia. May also be associated with complete transposition of the great arteries, congenitally corrected transposition of the great arteries, pulmonary atresia, pulmonary stenosis, subaortic stenosis, or ventricular septal defect (small or large).
830	Single ventricle, Unbalanced AV canal	Single ventricle anomalies with a common atrioventricular (AV) valve and only one completely well developed ventricle. If the common AV valve opens predominantly into the morphologic left ventricle, the defect is termed a left ventricular (LV)-type or LV-dominant AV septal defect. If the common AV valve opens predominantly into the morphologic right ventricle, the defect is termed a right ventricular (RV)-type or RV-dominant AV septal defect.
840	Single ventricle, Heterotaxia syndrome	Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome. Visceral heterotaxy syndrome is literally defined as a pattern of anatomic organization of the thoracic and abdominal organs that is neither the expected usual or normal arrangement (so-called situs solitus) nor complete situs inversus (the unusual or mirror-image arrangement of normal). If asymmetry of the thoracic and abdominal viscera is the usual or normal situation, visceral heterotaxy syndrome includes

- patients with an unusual degree of thoracic and abdominal visceral symmetry. This broad term includes patients with a wide variety of complex cardiac lesions. One way to impose order on this diverse group of cardiac lesions is to stratify them according to the morphology of the atrial appendages. In atrial appendage isomerism, both atrial appendages are similar rather than displaying their usual distinctive morphology. Right or left atrial appendage isomerism exists when both atria have right or left atrial appendage morphologic characteristics, respectively. Right atrial appendage isomerism is frequently associated with bilaterally trilobed lungs (each with short bronchi) and asplenia. Left atrial appendage isomerism frequently is associated with bilaterally bilobed lungs (each with long bronchi) and polysplenia. Many types of anomalies of systemic venous connection are frequently associated with heterotaxy syndrome.
- 850 Single ventricle, Other
- If the single ventricle is of primitive or indeterminate type, other is chosen in coding. It is recognized that a considerable variety of other structural cardiac malformations (e.g., biventricular hearts with straddling atrioventricular valves, pulmonary atresia with intact ventricular septum, some complex forms of double outlet right ventricle) may at times be best managed in a fashion similar to that which is used to treat univentricular hearts. They are not to be coded in this section of the nomenclature, but according to the underlying lesions.
- 851 Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)
- Indicate if the patient has the diagnosis of “Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)”. In the event of Single Ventricle occurring in association with Total anomalous pulmonary venous connection (TAPVC), code “Single Ventricle + Total anomalous pulmonary venous connection (TAPVC)”, and then use additional (secondary) diagnostic codes to describe the Single Ventricle and the Total anomalous pulmonary venous connection (TAPVC) separately to provide further documentation about the Single Ventricle and Total anomalous pulmonary venous connection (TAPVC) types. {“Total anomalous pulmonary venous connection (TAPVC)” is defined as a heart where all of the pulmonary veins connect anomalously with the right atrium or to one or more of its venous tributaries. None of the pulmonary veins connect normally to the left atrium.} {The version of the IPCCC derived from the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and STS uses the term “single ventricle” as synonymous for the “functionally univentricular heart”. (The functionally univentricular heart is defined as a spectrum of cardiac malformations in which entire ventricular mass is

functionally univentricular; in other words, whenever only one ventricle is capable, for whatever reason, of supporting either the systemic or the pulmonary circulation.) The consensus of the EACTS and STS Congenital Heart Surgery Database Committees is that the nomenclature proposal for single ventricle hearts would encompass hearts with double inlet atrioventricular connection (both double inlet left ventricle [DILV] and double inlet right ventricle [DIRV]), hearts with absence of one atrioventricular connection (mitral atresia and tricuspid atresia), hearts with a common atrioventricular valve and only one completely well-developed ventricle (unbalanced common atrioventricular canal defect), hearts with only one fully well-developed ventricle and heterotaxia syndrome (single ventricle heterotaxia syndrome), and finally other rare forms of univentricular hearts that do not fit in one of the specified major categories. In the version of the IPCCC derived from the nomenclature of the International Congenital Heart Surgery Nomenclature and Database Project of the EACTS and the STS, patients classified in this section of the nomenclature, therefore, include all those who would be coded using the Short List for “Single Ventricle”, specifically: (1) Single ventricle; (2) Single ventricle, DILV; (3) Single ventricle, DIRV; (4) Single ventricle, Heterotaxia syndrome; (5) Single ventricle, Mitral atresia; (6) Single ventricle, Tricuspid atresia; (7) Single ventricle, Unbalanced AV canal. (Despite the recognition that hypoplastic left heart syndrome is a common form of functionally univentricular heart, with a single or dominant ventricle of right ventricular morphology, the EACTS-STS version of the IPCCC includes an entirely separate section for consideration of hypoplastic left heart syndrome. Also, it is recognized that a considerable variety of other structural cardiac malformations, such as pulmonary atresia with intact ventricular septum, biventricular hearts with straddling atrioventricular valves, and some complex forms of double outlet right ventricle (DORV), may at times be best managed in a fashion similar to that which is used to treat other functionally univentricular hearts. Nomenclature for description of those entities, however, is not included in this Single Ventricle section of the EACTS-STS version of the IPCCC.)} [1] [1]. Jacobs JP, Franklin RCG, Jacobs ML, Colan SD, Tchervenkov CI, Maruszewski B, Gaynor JW, Spray TL, Stellin G, Aiello VD, Béland MJ, Krogmann ON, Kurosawa H, Weinberg PM, Elliott MJ, Mavroudis C, Anderson R. Classification of the Functionally Univentricular Heart: Unity from mapped codes. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges in the Management of the Functionally Univentricular Heart, Jacobs JP, Wernovsky G, Gaynor

- JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16, Supplement 1: 9 – 21, February 2006.
- 870 Congenitally corrected TGA Indicate if the patient has the diagnosis of “Congenitally corrected TGA”. Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.
- 872 Congenitally corrected TGA, IVS Indicate if the patient has the diagnosis of “Congenitally corrected TGA, IVS”. “Congenitally corrected TGA, IVS” is “Congenitally corrected transposition with an intact ventricular septum”, in other words, “Congenitally corrected transposition with no VSD”. (Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)
- 874 Congenitally corrected TGA, Indicate if the patient has the diagnosis of “Congenitally

IVS-LVOTO

corrected TGA, IVS-LVOTO". "Congenitally corrected TGA, IVS-LVOTO" is "Congenitally corrected transposition with an intact ventricular septum and left ventricular outflow tract obstruction", in other words, "Congenitally corrected transposition with left ventricular outflow tract obstruction and no VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

876 Congenitally corrected TGA, VSD

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD". "Congenitally corrected TGA, VSD" is "Congenitally corrected transposition with a VSD". (Congenitally corrected transposition is synonymous with the terms 'corrected transposition' and 'discordant atrioventricular connections with discordant ventriculo-arterial connections', and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). Cardiology in the Young, Volume 16 (Supplement 3): 72-84, September 2006.)

878 Congenitally corrected TGA, VSD-LVOTO

Indicate if the patient has the diagnosis of "Congenitally corrected TGA, VSD-LVOTO". "Congenitally

corrected TGA, VSD-LVOTO” is “Congenitally corrected transposition with a VSD and left ventricular outflow tract obstruction”. (Congenitally corrected transposition is synonymous with the terms ‘corrected transposition’ and ‘discordant atrioventricular connections with discordant ventriculo-arterial connections’, and is defined as a spectrum of cardiac malformations where the atrial chambers are joined to morphologically inappropriate ventricles, and the ventricles then support morphologically inappropriate arterial trunks [1]. [1] Jacobs JP, Franklin RCG, Wilkinson JL, Cochrane AD, Karl TR, Aiello VD, Béland MJ, Colan SD, Elliott, MJ, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Tchervenkov CI, Weinberg PM. The nomenclature, definition and classification of discordant atrioventricular connections. In 2006 Supplement to *Cardiology in the Young: Controversies and Challenges of the Atrioventricular Junctions and Other Challenges Facing Paediatric Cardiovascular Practitioners and their Patients*, Jacobs JP, Wernovsky G, Gaynor JW, and Anderson RH (editors). *Cardiology in the Young*, Volume 16 (Supplement 3): 72-84, September 2006.)

880 TGA, IVS

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

890 TGA, IVS-LVOTO

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with an intact ventricular septum and associated left ventricular obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).

900 TGA, VSD

A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects.

- There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 910 TGA, VSD-LVOTO
- A malformation of the heart in which there is atrioventricular concordance and ventriculoarterial discordance with one or more ventricular septal defects and left ventricular outflow tract obstruction. There may be d, l, or ambiguous transposition (segmental diagnoses include S,D,D, S,D,L, S,D,A). Also to be included in this diagnostic grouping are those defects with situs inversus, L-loop ventricles and either d or l transposition (segmental diagnosis of I,L,L and I,L,D) and occasionally those defects with ambiguous situs of the atria which behave as physiologically uncorrected transposition and are treated with arterial switch (segmental diagnoses include A,L,L and A,D,D).
- 930 DORV, VSD type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, VSD type, there is an associated subaortic or doubly-committed VSD and no pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 940 DORV, TOF type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TOF type, there is an associated subaortic or doubly-committed VSD and pulmonary outflow tract obstruction. Subaortic VSD's are located beneath the aortic valve. Doubly-committed VSD's lie beneath the leaflets of the aortic and pulmonary valves (juxtaarterial). DORV can occur in association with pulmonary atresia, keeping in mind in coding that in the nomenclature developed for DORV, there must be usual atrial arrangements and concordant

- atrioventricular connections, and normal or near-normal sized ventricles (in this situation DORV is coded as a primary diagnosis). Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate Single ventricle listing.
- 950 DORV, TGA type
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, TGA type, there is an associated subpulmonary VSD. Most frequently, there is no pulmonary outflow tract obstruction (Taussig-Bing heart). The aorta is usually to the right and slightly anterior to or side-by-side with the pulmonary artery. Associated aortic outflow tract stenosis (subaortic, aortic arch obstruction) is commonly associated with the Taussig-Bing heart and if present should be coded as a secondary diagnosis. Rarely, there is associated pulmonary outflow tract obstruction. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 960 DORV, Remote VSD (uncommitted VSD)
- Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In double outlet right ventricle, Remote VSD type, there is a remote or noncommitted VSD. The VSD is far removed from both the aortic and pulmonary valves, usually within the inlet septum. Many of these VSD's are in hearts with DORV and common atrioventricular canal/septal defect. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DORV is to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 2030 DORV + AVSD (AV Canal)
- Indicate if the patient has the diagnosis of "DORV + AVSD (AV Canal)". In the event of DORV occurring in association with AVSD (AV Canal), code "DORV + AVSD (AV Canal)", and then use additional (secondary) diagnostic codes to describe the DORV and

- the AVSD (AV Canal) separately to provide further documentation about the DORV and AVSD (AV Canal) types. {"DORV" is "Double outlet right ventricle" and is defined as a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle.} In this case, the DORV exists in combination with an atrioventricular septal defect and common atrioventricular junction guarded by a common atrioventricular valve.
- 975 DORV, IVS Double outlet right ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the right ventricle. In the rare case of double outlet right ventricle with IVS the ventricular septum is intact. In the nomenclature developed for DORV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connections with DORV are to be coded under congenitally corrected TGA. DORV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 980 DOLV Double outlet left ventricle is a type of ventriculoarterial connection in which both great vessels arise entirely or predominantly from the left ventricle. In the nomenclature developed for DOLV, there must be usual atrial arrangements and concordant atrioventricular connections, and normal or near-normal sized ventricles. Discordant atrioventricular connection with DOLV is to be coded under congenitally corrected TGA. DOLV associated with univentricular atrioventricular connections, atrioventricular valve atresia, or atrial isomerism is to be coded under the appropriate single ventricle listing.
- 990 Coarctation of aorta Indicate if the patient has the diagnosis of "Coarctation of aorta". A "Coarctation of the aorta" generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta.
- 1000 Aortic arch hypoplasia Hypoplasia of the aortic arch is hypoplasia of the proximal or distal transverse arch or the aortic isthmus. The isthmus (arch between the left subclavian and insertion of the patent ductus arteriosus / ligamentum arteriosum) is hypoplastic if its diameter is less than 40% of the diameter of the ascending aorta. The proximal transverse arch (arch between the innominate and left carotid arteries) and distal transverse arch (arch between the left carotid and left subclavian arteries) are hypoplastic if their diameters are less than 60% and 50%, respectively, of the diameter of the ascending

- aorta.
- 92 VSD + Aortic arch hypoplasia A ventricular septal defect, any type, associated with hypoplasia of the aortic arch. (See diagnosis definition 1000 for a definition of hypoplasia of the aortic arch.)
- 94 VSD + Coarctation of aorta Indicate if the patient has the diagnosis of “VSD + Coarctation of aorta”. In the event of a VSD occurring in association with Coarctation of aorta, code “VSD + Coarctation of aorta”, and then use additional (secondary) diagnostic codes to describe the VSD and the Coarctation of aorta separately to provide further documentation about the individual VSD and Coarctation of aorta types. {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)} {A “Coarctation of the aorta” generally indicates a narrowing of the descending thoracic aorta just distal to the left subclavian artery. However, the term may also be accurately used to refer to a region of narrowing anywhere in the thoracic or abdominal aorta. }
- 1010 Coronary artery anomaly, Anomalous aortic origin of coronary artery from aorta (AAOCA) Anomalous aortic origins of the coronary arteries include a spectrum of anatomic variations of the normal coronary artery origins. Coronary artery anomalies of aortic origin to be coded under this diagnostic field include: anomalies of take-off (high take-off), origin (sinus), branching, and number. An anomalous course of the coronary artery vessels is also significant, particularly those coronary arteries that arise or course between the great vessels.
- 1020 Coronary artery anomaly, Anomalous pulmonary origin (includes ALCAPA) In patients with anomalous pulmonary origin of the coronary artery, the coronary artery (most commonly the left coronary artery) arises from the pulmonary artery rather than from the aorta. Rarely, the right coronary artery, the circumflex, or both coronary arteries may arise from the pulmonary artery.
- 1030 Coronary artery anomaly, Fistula The most common of coronary artery anomalies, a coronary arteriovenous fistula is a communication between a coronary artery and either a chamber of the heart (coronary-cameral fistula) or any segment of the systemic or pulmonary circulation (coronary arteriovenous fistula). They may be congenital or acquired (traumatic, infectious, iatrogenic) in origin, and are mostly commonly seen singly, but occasionally

		multiple fistulas are present. Nomenclature schemes have been developed that further categorize the fistulas by vessel of origin and chamber of termination, and one angiographic classification scheme by Sakakibara has surgical implications. Coronary artery fistulas can be associated with other congenital heart anomalies such as tetralogy of Fallot, atrial septal defect, ventricular septal defect, and pulmonary atresia with intact ventricular septum, among others. The major cardiac defect should be listed as the primary diagnosis and the coronary artery fistula should be as an additional secondary diagnoses.
1040	Coronary artery anomaly, Aneurysm	Coronary artery aneurysms are defined as dilations of a coronary vessel 1.5 times the adjacent normal coronaries. There are two forms, saccular and fusiform (most common), and both may be single or multiple. These aneurysms may be congenital or acquired (atherosclerotic, Kawasaki, systemic diseases other than Kawasaki, iatrogenic, infectious, or traumatic) in origin.
1050	Coronary artery anomaly, Other	Coronary artery anomalies which may fall within this category include coronary artery bridging and coronary artery stenosis, as well as secondary coronary artery variations seen in congenital heart defects such as tetralogy of Fallot, transposition of the great arteries, and truncus arteriosus (with the exception of variations that can be addressed by a more specific coronary artery anomaly code).
1070	Interrupted aortic arch	Indicate if the patient has the diagnosis of “Interrupted aortic arch”. Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.
2020	Interrupted aortic arch + VSD	Indicate if the patient has the diagnosis of “Interrupted aortic arch + VSD”. In the event of interrupted aortic arch occurring in association with VSD, code “Interrupted aortic arch + VSD”, and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the VSD separately to provide further documentation about the individual interrupted aortic arch and VSD types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to

- the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {A "VSD" is a "Ventricular Septal Defect" and is also known as an "Interventricular communication". A VSD is defined as "a hole between the ventricular chambers or their remnants". (The VSD is defined on the basis of its margins as seen from the aspect of the morphologically right ventricle. In the setting of double outlet right ventricle, the defect provides the outflow from the morphologically left ventricle. In univentricular atrioventricular connections with functionally single left ventricle with an outflow chamber, the communication is referred to by some as a bulboventricular foramen.)}
- 2000 Interrupted aortic arch + AP window (aortopulmonary window)
- Indicate if the patient has the diagnosis of "Interrupted aortic arch + AP window (aortopulmonary window)". In the event of interrupted aortic arch occurring in association with AP window, code "Interrupted aortic arch + AP window (aortopulmonary window)", and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and the AP window separately to provide further documentation about the individual interrupted aortic arch and AP window types. {Interrupted aortic arch is defined as the loss of luminal continuity between the ascending and descending aorta. In most cases blood flow to the descending thoracic aorta is through a PDA, and there is a large VSD. Arch interruption is further defined by site of interruption. In type A, interruption is distal to the left subclavian artery; in type B interruption is between the left carotid and left subclavian arteries; and in type C interruption occurs between the innominate and left carotid arteries.} {An "AP window (aortopulmonary window)" is defined as a defect with side-to-side continuity of the lumens of the aorta and pulmonary arterial tree, which is distinguished from common arterial trunk (truncus arteriosus) by the presence of two arterial valves or their atretic remnants. (In other words, an aortopulmonary window is a communication between the main pulmonary artery and ascending aorta in the presence of two separate semilunar [pulmonary and aortic] valves. The presence of two separate semilunar valves distinguishes AP window from truncus arteriosus. Type 1 proximal defect: AP window located just above the sinus of Valsalva, a few millimeters above the semilunar valves, with a superior rim but little inferior rim separating the AP window from the semilunar valves. Type 2 distal defect: AP window located in the uppermost portion of the ascending aorta, with a well-formed inferior rim but little superior rim. Type 3 total defect: AP window involving the majority of the ascending aorta, with little

- superior and inferior rims. The intermediate type of AP window is similar to the total defect but with adequate superior and inferior rims. In the event of AP window occurring in association with interrupted aortic arch, code “Interrupted aortic arch + AP window (aortopulmonary window)”, and then use additional (secondary) diagnostic codes to describe the interrupted aortic arch and AP window separately to provide further documentation about the individual interrupted arch and AP window types.}}
- 1080 Patent ductus arteriosus
- Indicate if the patient has the diagnosis of “Patent ductus arteriosus”. The ductus arteriosus (arterial duct) is an essential feature of fetal circulation, connecting the main pulmonary trunk with the descending aorta, distal to the origin of the left subclavian artery. In most patients it is on the left side. If a right aortic arch is present, it may be on the right or the left; very rarely it is bilateral. When luminal patency of the duct persists post-natally, it is referred to as patent ductus arteriosus (patent arterial duct). The length and diameter may vary considerably from case to case. The media of the ductus consists mainly of smooth muscle that is arranged spirally, and the intima is much thicker than that of the aorta. (A patent ductus arteriosus is a vascular arterial connection between the thoracic aorta and the pulmonary artery. Most commonly a PDA has its origin from the descending thoracic aorta, just distal and opposite the origin of the left subclavian artery. The insertion of the ductus is most commonly into the very proximal left pulmonary artery at its junction with the main pulmonary artery. Origination and insertion sites can be variable, however.)
- 1090 Vascular ring
- The term vascular ring refers to a group of congenital vascular anomalies that encircle and compress the esophagus and trachea. The compression may be from a complete anatomic ring (double aortic arch or right aortic arch with a left ligamentum) or from a compressive effect of an aberrant vessel (innominate artery compression syndrome).
- 1100 Pulmonary artery sling
- In pulmonary artery sling, the left pulmonary artery originates from the right pulmonary artery and courses posteriorly between the trachea and esophagus in its route to the left lung hilum, causing a sling-like compression of the trachea.
- 1110 Aortic aneurysm (including pseudoaneurysm)
- An aneurysm of the aorta is defined as a localized dilation or enlargement of the aorta at any site along its length (from aortic annulus to aortoiliac bifurcation). A true aortic aneurysm involves all layers of the aortic wall. A false aortic aneurysm (pseudoaneurysm) is defined as a dilated segment of the aorta not containing all layers of the aortic wall and may include postoperative or post-procedure false aneurysms at

		anastomotic sites, traumatic aortic injuries or transections, and infectious processes leading to a contained rupture.
1120	Aortic dissection	Aortic dissection is a separation of the layers of the aortic wall. Extension of the plane of the dissection may progress to free rupture into the pericardium, mediastinum, or pleural space if not contained by the outer layers of the media and adventitia. Dissections may be classified as acute or chronic (if they have been present for more than 14 days)..
1130	Lung disease, Benign	Lung disease arising from any etiology (congenital or acquired) which does not result in death or lung or heart-lung transplant; examples might be non-life threatening asthma or emphysema, benign cysts.
1140	Lung disease, Malignant	Lung disease arising from any etiology (congenital or acquired, including pulmonary parenchymal disease, pulmonary vascular disease, congenital heart disease, neoplastm, etc.) which may result in death or lung or heart-lung transplant.
1150	Pectus	Pectus excavatum is a chest wall deformity in which the sternum is depressed. Pectus carinatum is a protrusion of the sternum.
1160	Tracheal stenosis	Tracheal stenosis is a reduction in the anatomic luminal diameter of the trachea by more than 50% of the remaining trachea. This stenosis may be congenital or acquired (as in post-intubation or traumatic tracheal stenosis).
1170	Airway disease	Included in this diagnostic category would be airway pathology not included under the definition of tracheal stenosis such as tracheomalacia, bronchotracheomalacia, tracheal right upper lobe, bronchomalacia, subglottic stenosis, bronchial stenosis, etc.
1430	Pleural disease, Benign	Benign diseases of the mediastinal or visceral pleura.
1440	Pleural disease, Malignant	Malignant diseases of the mediastinal or visceral pleura.
1450	Pneumothorax	A collection of air or gas in the pleural space.
1460	Pleural effusion	Abnormal accumulation of fluid in the pleural space.
1470	Chylothorax	The presence of lymphatic fluid in the pleural space secondary to a leak from the thoracic duct or its branches. Chylothorax is a specific type of pleural effusion.
1480	Empyema	A collection of purulent material in the pleural space, usually secondary to an infection.
1490	Esophageal disease, Benign	Any benign disease of the esophagus.
1500	Esophageal disease, Malignant	Any malignant disease of the esophagus.
1505	Mediastinal disease	Any disease of the mediastinum awaiting final benign/malignant pathology determination.

1510	Mediastinal disease, Benign	Any benign disease of the mediastinum.
1520	Mediastinal disease, Malignant	Any malignant disease of the mediastinum.
1540	Diaphragm paralysis	Paralysis of diaphragm, unilateral or bilateral.
1550	Diaphragm disease, Other	Any disease of the diaphragm other than paralysis.
1180	Arrhythmia	Any cardiac rhythm other than normal sinus rhythm.
2040	Arrhythmia, Atrial	Indicate if the patient has the diagnosis of “Arrhythmia, Atrial”. “Arrhythmia, Atrial” ROOT Definition = Non-sinus atrial rhythm with or without atrioventricular conduction. [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 373.
2050	Arrhythmia, Junctional	Indicate if the patient has the diagnosis of “Arrhythmia, Junctional”. “Arrhythmias arising from the atrioventricular junction; may be bradycardia, tachycardia, premature beats, or escape rhythm [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 379.
2060	Arrhythmia, Ventricular	Indicate if the patient has the diagnosis of “Arrhythmia, Ventricular”. “Arrhythmia, Ventricular” ROOT Definition = Abnormal rhythm originating from the ventricles [1]. [1]. Jacobs JP. (Editor). 2008 Supplement to Cardiology in the Young: Databases and The Assessment of Complications associated with The Treatment of Patients with Congenital Cardiac Disease, Prepared by: The Multi-Societal Database Committee for Pediatric and Congenital Heart Disease, Cardiology in the Young, Volume 18, Supplement S2, pages 1 – 530, December 9, 2008, page 393.
1185	Arrhythmia, Heart block	Atrioventricular block may be congenital or acquired, and may be of varying degree (first, second, or third degree).
1190	Arrhythmia, Heart block, Acquired	Atrioventricular block, when acquired, may be post-surgical, or secondary to myocarditis or other etiologies; the block may be first, second or third degree.
1200	Arrhythmia, Heart block, Congenital	Atrioventricular block, when congenital, may be first, second or third degree block.
1220	Arrhythmia, Pacemaker,	Indications for pacemaker replacement may include end

	Indication for replacement	of generator life, malfunction, or infection.
1230	Atrial Isomerism, Left	In isomerism, both appendages are of like morphology or structure; in left atrial isomerism both the right atrium and left atrium appear to be a left atrium structurally.
1240	Atrial Isomerism, Right	In isomerism, both appendages are of like morphology or structure; in right atrial isomerism both the right atrium and left atrium appear to be a right atrium structurally.
2090	Dextrocardia	Indicate if the patient has the diagnosis of ‘‘Dextrocardia’’. ‘‘Dextrocardia’’ is most usually considered synonymous with a right-sided ventricular mass, whilst ‘‘dextroversion’’ is frequently defined as a configuration where the ventricular apex points to the right. In a patient with the usual atrial arrangement, or situs solitus, dextroversion, therefore, implies a turning to the right of the heart [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2100	Levocardia	Indicate if the patient has the diagnosis of ‘‘Levocardia’’. ‘‘Levocardia’’ usually considered synonymous with a left-sided ventricular mass, whilst ‘‘levoverision’’ is frequently defined as a configuration where the ventricular apex points to the left [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
2110	Mesocardia	Indicate if the patient has the diagnosis of ‘‘Mesocardia’’. ‘‘Mesocardia’’ is most usually considered synonymous with the ventricular mass occupying the midline [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW,

- Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
- 2120 Situs inversus
- Indicate if the patient has the diagnosis of “Situs inversus” of the atrial chambers. The development of morphologically right-sided structures on one side of the body, and morphologically left-sided structures on the other side, is termed lateralization. Normal lateralization, the usual arrangement, is also known as “situs solitus”. The mirror-imaged arrangement is also known as “situs inversus”. The term “visceroatrial situs” is often used to refer to the situs of the viscera and atria when their situs is in agreement. The arrangement of the organs themselves, and the arrangement of the atrial chambers, is not always the same. Should such disharmony be encountered, the sidedness of the organs and atrial chambers must be separately specified [1]. [1]. Jacobs JP, Anderson RH, Weinberg P, Walters III HL, Tchervenkov CI, Del Duca D, Franklin RCG, Aiello VD, Béland MJ, Colan SD, Gaynor JW, Krogmann ON, Kurosawa H, Maruszewski B, Stellin G, Elliott MJ. The nomenclature, definition and classification of cardiac structures in the setting of heterotaxy. In 2007 Supplement to Cardiology in the Young: Controversies and Challenges Facing Paediatric Cardiovascular Practitioners and their Patients, Anderson RH, Jacobs JP, and Wernovsky G, editors. Cardiology in the Young, Volume 17, Supplement 2, pages 1–28, doi: 10.1017/S1047951107001138, September 2007.
- 1250 Aneurysm, Ventricular, Right (including pseudoaneurysm)
- An aneurysm of the right ventricle is defined as a localized dilation or enlargement of the right ventricular wall.
- 1260 Aneurysm, Ventricular, Left (including pseudoaneurysm)
- An aneurysm of the left ventricle is defined as a localized dilation or enlargement of the left ventricular wall.
- 1270 Aneurysm, Pulmonary artery
- An aneurysm of the pulmonary artery is defined as a localized dilation or enlargement of the pulmonary artery trunk and its central branches (right and left pulmonary artery).
- 1280 Aneurysm, Other
- A localized dilation or enlargement of a cardiac vessel or chamber not coded in specific fields available for aortic aneurysm, sinus of Valsalva aneurysm, coronary artery aneurysm, right ventricular aneurysm, left

		ventricular aneurysm, or pulmonary artery aneurysm.
1290	Hypoplastic RV	Small size of the right ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the right ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
1300	Hypoplastic LV	Small size of the left ventricle. This morphological abnormality usually is an integral part of other congenital cardiac anomalies and, therefore, frequently does not need to be coded separately. It should, however, be coded as secondary to an accompanying congenital cardiac anomaly if the left ventricular hypoplasia is not considered an integral and understood part of the primary congenital cardiac diagnosis. It would rarely be coded as a primary and/or isolated diagnosis.
2070	Postoperative bleeding	Indicate if the patient has the diagnosis of “Postoperative bleeding”.
1310	Mediastinitis	Inflammation/infection of the mediastinum, the cavity between the lungs which holds the heart, great vessels, trachea, esophagus, thymus, and connective tissues. In the United States mediastinitis occurs most commonly following chest surgery.
1320	Endocarditis	An infection of the endocardial surface of the heart, which may involve one or more heart valves (native or prosthetic) or septal defects or prosthetic patch material placed at previous surgery.
1325	Rheumatic heart disease	Heart disease, usually valvular (e.g., mitral or aortic), following an infection with group A streptococci
1330	Prosthetic valve failure	Indicate if the patient has the diagnosis of “Prosthetic valve failure”. This diagnosis is the primary diagnosis to be entered for patients undergoing replacement of a previously placed valve (not conduit) prosthesis, whatever type (e.g., bioprosthetic, mechanical, etc.). Failure may be due to, among others, patient somatic growth, malfunction of the prosthesis, or calcification or overgrowth of the prosthesis (e.g., pannus formation). Secondary or fundamental diagnosis would relate to the underlying valve disease entity. As an example, a patient undergoing removal or replacement of a prosthetic pulmonary valve previously placed for pulmonary insufficiency after repair of tetralogy of Fallot would have as a primary diagnosis “Prosthetic valve failure”, as a secondary diagnosis “Pulmonary insufficiency”, and as a fundamental diagnosis “Tetralogy of Fallot”.

1340	Myocardial infarction	A myocardial infarction is the development of myocardial necrosis caused by a critical imbalance between the oxygen supply and demand of the myocardium. While a myocardial infarction may be caused by any process that causes this imbalance it most commonly results from plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Myocardial infarction is a usual accompaniment of anomalous left coronary artery from the pulmonary artery (ALCAPA).
1350	Cardiac tumor	An abnormal growth of tissue in or on the heart, demonstrating partial or complete lack of structural organization, and no functional coordination with normal cardiac tissue. Commonly, a mass is recognized which is distinct from the normal structural components of the heart. A primary cardiac tumor is one that arises directly from tissues of the heart, (e.g., myxoma, fibroelastoma, rhabdomyoma, fibroma, lipoma, pheochromocytoma, teratoma, hemangioma, mesothelioma, sarcoma). A secondary cardiac tumor is one that arises from tissues distant from the heart, with subsequent spread to the otherwise normal tissues of the heart, (e.g., renal cell tumor with caval extension from the kidney to the level of the heart or tumor with extension from other organs or areas of the body (hepatic, adrenal, uterine, infradiaphragmatic)). N.B., in the nomenclature system developed, cardiac thrombus and cardiac vegetation are categorized as primary cardiac tumors.
1360	Pulmonary AV fistula	An abnormal intrapulmonary connection (fistula) between an artery and vein that occurs in the blood vessels of the lungs. Pulmonary AV fistulas may be seen in association with congenital heart defects; the associated cardiac defect should be coded as well.
1370	Pulmonary embolism	A pulmonary embolus is a blockage of an artery in the lungs by fat, air, clumped tumor cells, or a blood clot.
1385	Pulmonary vascular obstructive disease	Pulmonary vascular obstructive disease (PVOD) other than those specifically defined elsewhere (Eisenmenger's pulmonary vascular obstructive disease, primary pulmonary hypertension, persistent fetal circulation). The spectrum includes PVOD arising from (1) pulmonary arterial hypertension or (2) pulmonary venous hypertension or (3) portal hypertension, or (4) collagen vascular disease, or (5) drug or toxin induced, or (6) diseases of the respiratory system, or (7) chronic thromboembolic disease, among others.
1390	Pulmonary vascular obstructive disease (Eisenmenger's)	"Eisenmenger syndrome" could briefly be described as "Acquired severe pulmonary vascular disease associated with congenital heart disease (Eisenmenger)". Eisenmenger syndrome is an acquired condition. In

		Eisenmenger-type pulmonary vascular obstructive disease, long-term left-to-right shunting (e.g., through a ventricular or atrial septal defect, patent ductus arteriosus, aortopulmonary window) can lead to chronic pulmonary hypertension with resultant pathological changes in the pulmonary vessels. The vessels become thick-walled, stiff, noncompliant, and may be obstructed. In Eisenmenger syndrome, the long-term left-to-right shunting will reverse and become right to left. Please note that the specific heart defect should be coded as a secondary diagnosis.
1400	Primary pulmonary hypertension	Primary pulmonary hypertension is a rare disease characterized by elevated pulmonary artery hypertension with no apparent cause. Two forms are included in the nomenclature, a sporadic form and a familial form which can be linked to the BMPR-II gene.
1410	Persistent fetal circulation	Persistence of the blood flow pattern seen in fetal life, in which high pulmonary vascular resistance in the lungs results in decreased blood flow to the lungs. Normally, after birth pulmonary pressure falls with a fall in pulmonary vascular resistance and there is increased perfusion of the lungs. Persistent fetal circulation, also known as persistent pulmonary hypertension of the newborn, can be related to lung or diaphragm malformations or lung immaturity.
1420	Meconium aspiration	Aspiration of amniotic fluid stained with meconium before, during, or after birth can lead to pulmonary sequelae including (1) pneumothorax, (2) pneumomediastinum, (3) pneumopericardium, (4) lung infection, and (5) meconium aspiration syndrome (MAS) with persistent pulmonary hypertension.
1560	Cardiac, Other	Any cardiac diagnosis not specifically delineated in other diagnostic codes.
1570	Thoracic and/or mediastinal, Other	Any thoracic and/or mediastinal disease not specifically delineated in other diagnostic codes.
1580	Peripheral vascular, Other	Any peripheral vascular disease (congenital or acquired) or injury (from trauma or iatrogenic); vessels involved may include, but are not limited to femoral artery, femoral vein, iliac artery, brachial artery, etc.
7000	Normal heart	Normal heart.
7777	Miscellaneous, Other	Any disease (congenital or acquired) not specifically delineated in other diagnostic codes.
4010	Status post - PFO, Primary closure	Status post - Suture closure of patent foramen ovale (PFO).
4020	Status post - ASD repair, Primary closure	Status post - Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
4030	Status post - ASD repair, Patch	Status post - Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus

		ASD.
4040	Status post - ASD repair, Device	Status post - Closure of any type ASD (including PFO) using a device.
6110	Status post - ASD repair, Patch + PAPVC repair	
4050	Status post - ASD, Common atrium (single atrium), Septation	Status post - Septation of common (single) atrium using any type patch material.
4060	Status post - ASD creation/enlargement	Status post - Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
4070	Status post - ASD partial closure	Status post - Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
4080	Status post - Atrial septal fenestration	Status post - Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
4085	Status post - Atrial fenestration closure	Status post - Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
4100	Status post - VSD repair, Primary closure	Status post - Suture closure of any type VSD.
4110	Status post - VSD repair, Patch	Status post - Patch closure (using any type of patch material) of any type VSD.
4120	Status post - VSD repair, Device	Status post - Closure of any type VSD using a device.
4130	Status post - VSD, Multiple, Repair	Status post - Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
4140	Status post - VSD creation/enlargement	Status post - Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
4150	Status post - Ventricular septal fenestration	Status post - Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.

4170	Status post - AVC (AVSD) repair, Complete (CAVSD)	Status post - Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
4180	Status post - AVC (AVSD) repair, Intermediate (Transitional)	Status post - Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
4190	Status post - AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Status post - Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
6300	Status post - Valvuloplasty, Common atrioventricular valve	
6250	Status post - Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
6230	Status post - Valve replacement, Common atrioventricular valve	
4210	Status post - AP window repair	Status post - Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
4220	Status post - Pulmonary artery origin from ascending aorta (hemitruncus) repair	Status post - Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
4230	Status post - Truncus arteriosus repair	Status post - Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
4240	Status post - Valvuloplasty, Truncal valve	Status post - Truncal valve repair, any type.
6290	Status post - Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
4250	Status post - Valve replacement, Truncal valve	Status post - Replacement of the truncal valve with a prosthetic valve.
6220	Status post - Truncus + Interrupted aortic arch repair	

	(IAA) repair	
4260	Status post - PAPVC repair	Status post - PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
4270	Status post - PAPVC, Scimitar, Repair	Status post - In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
6120	Status post - PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
4280	Status post - TAPVC repair	Status post - Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
6200	Status post - TAPVC repair + Shunt - systemic-to-pulmonary	
4290	Status post - Cor triatriatum repair	Status post - Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
4300	Status post - Pulmonary venous stenosis repair	Status post - Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
4310	Status post - Atrial baffle procedure (non-Mustard, non-Senning)	Status post - The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
4330	Status post - Anomalous	Status post - With the exception of atrial baffle

	systemic venous connection repair	procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
4340	Status post - Systemic venous stenosis repair	Status post - Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
4350	Status post - TOF repair, No ventriculotomy	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4360	Status post - TOF repair, Ventriculotomy, Nontransannular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4370	Status post - TOF repair, Ventriculotomy, Transannular patch	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
4380	Status post - TOF repair, RV-PA conduit	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
4390	Status post - TOF - AVC (AVSD) repair	Status post - Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect.

		Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
4400	Status post - TOF - Absent pulmonary valve repair	Status post - Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
4420	Status post - Pulmonary atresia - VSD (including TOF, PA) repair	Status post - For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
4430	Status post - Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	Status post - In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
4440	Status post - Unifocalization MAPCA(s)	Status post - Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
4450	Status post - Occlusion MAPCA(s)	Status post - Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
4460	Status post - Valvuloplasty, Tricuspid	Status post - Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
6280	Status post - Valvuloplasty converted to valve replacement in the same operation, Tricuspid	

4465	Status post - Ebstein's repair	Status post - To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
4470	Status post - Valve replacement, Tricuspid (TVR)	Status post - Replacement of the tricuspid valve with a prosthetic valve.
4480	Status post - Valve closure, Tricuspid (exclusion, univentricular approach)	Status post - In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
4490	Status post - Valve excision, Tricuspid (without replacement)	Status post - Excision of the tricuspid valve without placement of a valve prosthesis.
4500	Status post - Valve surgery, Other, Tricuspid	Status post - Other tricuspid valve surgery not specified in procedure codes.
4510	Status post - RVOT procedure	Status post - Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
4520	Status post - 1 1/2 ventricular repair	Status post - Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
4530	Status post - PA, reconstruction (plasty), Main (trunk)	Status post - Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
4540	Status post - PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Status post - Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated

		with debanding, both codes should be listed.
4550	Status post - PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Status post - Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
4570	Status post - DCRV repair	Status post - Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
4590	Status post - Valvuloplasty, Pulmonic	Status post - Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
6270	Status post - Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
4600	Status post - Valve replacement, Pulmonic (PVR)	Status post - Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
4630	Status post - Valve excision, Pulmonary (without replacement)	Status post - Excision of the pulmonary valve without placement of a valve prosthesis.
4640	Status post - Valve closure, Semilunar	Status post - Closure of a semilunar valve (pulmonic or aortic) by any technique.
4650	Status post - Valve surgery, Other, Pulmonic	Status post - Other pulmonic valve surgery not specified in procedure codes.
4610	Status post - Conduit placement, RV to PA	Status post - Placement of a conduit, any type, from RV to PA.
4620	Status post - Conduit placement, LV to PA	Status post - Placement of a conduit, any type, from LV to PA.
5774	Status post - Conduit placement, Ventricle to aorta	Status post - Placement of a conduit from the right or left ventricle to the aorta.
5772	Status post - Conduit placement, Other	Status post - Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
4580	Status post - Conduit reoperation	Status post - Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth,

		stenosis, insufficiency, infection, etc).
4660	Status post - Valvuloplasty, Aortic	Status post - Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
6240	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic	
6310	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
6320	Status post - Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	
4670	Status post - Valve replacement, Aortic (AVR)	Status post - Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
4680	Status post - Valve replacement, Aortic (AVR), Mechanical	Status post - Replacement of the aortic valve with a mechanical prosthetic valve.
4690	Status post - Valve replacement, Aortic (AVR), Bioprosthetic	Status post - Replacement of the aortic valve with a bioprosthetic prosthetic valve.
4700	Status post - Valve replacement, Aortic (AVR), Homograft	Status post - Replacement of the aortic valve with a homograft prosthetic valve.
4715	Status post - Aortic root replacement, Bioprosthetic	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
4720	Status post - Aortic root replacement, Mechanical	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
4730	Status post - Aortic root	Status post - Replacement of the aortic root (that portion

	replacement, Homograft	of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
4735	Status post - Aortic root replacement, Valve sparing	Status post - Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
4740	Status post - Ross procedure	Status post - Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
4750	Status post - Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
4760	Status post - Ross-Konno procedure	Status post - Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
4770	Status post - Other annular enlargement procedure	Status post - Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouagian and Nicks aortic annular enlargement procedures.
4780	Status post - Aortic stenosis, Subvalvar, Repair	Status post - Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
6100	Status post - Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
4790	Status post - Aortic stenosis, Supravalvar, Repair	Status post - Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three

		sinuses are patched separately.
4800	Status post - Valve surgery, Other, Aortic	Status post - Other aortic valve surgery not specified in other procedure codes.
4810	Status post - Sinus of Valsalva, Aneurysm repair	Status post - Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.)). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
4820	Status post - LV to aorta tunnel repair	Status post - LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
4830	Status post - Valvuloplasty, Mitral	Status post - Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissurotomy, leaflet repair, or papillary muscle repair.
6260	Status post - Valvuloplasty converted to valve replacement in the same operation, Mitral	
4840	Status post - Mitral stenosis, Supravalvar mitral ring repair	Status post - Supravalvar mitral ring repair.
4850	Status post - Valve replacement, Mitral (MVR)	Status post - Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
4860	Status post - Valve surgery, Other, Mitral	Status post - Other mitral valve surgery not specified in procedure codes.
4870	Status post - Norwood procedure	Status post - The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neo-aortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection. When coding the procedure "Norwood procedure", the

		<p>primary procedure of the operation should be “Norwood procedure”. The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:</p> <ol style="list-style-type: none"> 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery) 3. Shunt, Systemic to pulmonary, Other 4. Conduit placement, RV to PA 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) 8. HemiFontan
4880	Status post - HLHS biventricular repair	<p>Status post - Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.</p>
6160	Status post - Hybrid Approach "Stage 1", Application of RPA & LPA bands	<p>Status post - A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.</p>
6170	Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)	<p>Status post - A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.</p>

6180	Status post - Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA) + application of RPA & LPA bands	Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
6140	Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Aortic arch repair (Norwood [Stage 1] + Superior Cavopulmonary anastomosis(es) + PA Debanding)	Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
6150	Status post - Hybrid approach "Stage 2", Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding + Without aortic arch repair	Status post - A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
1590	Status post - Transplant, Heart	Status post - Heart transplantation, any technique, allograft or xenograft.
1610	Status post - Transplant, Heart and lung	Status post - Heart and lung (single or double) transplantation.
4910	Status post - Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Status post - Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.

4920	Status post - Pericardial drainage procedure	Status post - Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
4930	Status post - Pericardiectomy	Status post - Surgical removal of the pericardium.
4940	Status post - Pericardial procedure, Other	Status post - Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
4950	Status post - Fontan, Atrio-pulmonary connection	Status post - Fontan-type procedure with atrio-pulmonary connection.
4960	Status post - Fontan, Atrio-ventricular connection	Status post - Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
4970	Status post - Fontan, TCPC, Lateral tunnel, Fenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
4980	Status post - Fontan, TCPC, Lateral tunnel, Nonfenestrated	Status post - Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
5000	Status post - Fontan, TCPC, External conduit, Fenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
5010	Status post - Fontan, TCPC, External conduit, Nonfenestrated	Status post - Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
5025	Status post - Fontan revision or conversion (Re-do Fontan)	Status post - Revision of a previous Fontan procedure to a total cavopulmonary connection.
5030	Status post - Fontan, Other	Status post - Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
6340	Status post - Fontan + Atrioventricular valvuloplasty	
5035	Status post - Ventricular septation	Status post - Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
5050	Status post - Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
5060	Status post - Congenitally corrected TGA repair, Atrial switch and Rastelli	Status post - Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.

5070	Status post - Congenitally corrected TGA repair, VSD closure	Status post - Repair of congenitally corrected TGA by VSD closure only.
5080	Status post - Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Status post - Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
5090	Status post - Congenitally corrected TGA repair, Other	Status post - Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
5110	Status post - Arterial switch operation (ASO)	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
5120	Status post - Arterial switch operation (ASO) and VSD repair	Status post - Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
5123	Status post - Arterial switch procedure + Aortic arch repair	Status post - Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
5125	Status post - Arterial switch procedure and VSD repair + Aortic arch repair	Status post - Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
5130	Status post - Senning	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
5140	Status post - Mustard	Status post - Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
5145	Status post - Atrial baffle procedure, Mustard or Senning revision	Status post - Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).

5150	Status post - Rastelli	Status post - Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
5160	Status post - REV	Status post - The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
6190	Status post - Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
6210	Status post - TGA, Other procedures (Kawashima, LV-PA conduit, other)	
5180	Status post - DORV, Intraventricular tunnel repair	Status post - Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
5200	Status post - DOLV repair	Status post - Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli

		procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
5210	Status post - Coarctation repair, End to end	Status post - Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
5220	Status post - Coarctation repair, End to end, Extended	Status post - Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
5230	Status post - Coarctation repair, Subclavian flap	Status post - Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
5240	Status post - Coarctation repair, Patch aortoplasty	Status post - Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
5250	Status post - Coarctation repair, Interposition graft	Status post - Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
5260	Status post - Coarctation repair, Other	Status post - Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
5275	Status post - Coarctation repair + VSD repair	Status post - Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
5280	Status post - Aortic arch repair	Status post - Aortic arch repair, any technique.
5285	Status post - Aortic arch repair + VSD repair	Status post - Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
5290	Status post - Coronary artery fistula ligation	Status post - Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
5291	Status post - Anomalous origin of coronary artery from pulmonary artery repair	Status post - Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
5300	Status post - Coronary artery bypass	Status post - Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery

		pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
5305	Status post - Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
5310	Status post - Coronary artery procedure, Other	Status post - Any coronary artery procedure not specifically listed.
5320	Status post - Interrupted aortic arch repair	Status post - Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
5330	Status post - PDA closure, Surgical	Status post - Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
5340	Status post - PDA closure, Device	Status post - Closure of a PDA by device using transcatheter techniques.
5360	Status post - Vascular ring repair	Status post - Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
5365	Status post - Aortopexy	Status post - Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
5370	Status post - Pulmonary artery sling repair	Status post - Pulmonary artery sling repair by any technique.
5380	Status post - Aortic aneurysm repair	Status post - Aortic aneurysm repair by any technique.
5390	Status post - Aortic dissection repair	Status post - Aortic dissection repair by any technique.
5400	Status post - Lung biopsy	Status post - Lung biopsy, any technique.
1600	Status post - Transplant, Lung(s)	Status post - Lung or lobe transplantation of any type.
5420	Status post - Lung procedure, Other	Status post - Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
5430	Status post - Pectus repair	Status post - Repair of pectus excavatum or carinatum by any technique.
5440	Status post - Tracheal procedure	Status post - Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.

5450	Status post - Pacemaker implantation, Permanent	Status post - Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
5460	Status post - Pacemaker procedure	Status post - Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
6350	Status post - Explantation of pacing system	
5470	Status post - ICD (AICD) implantation	Status post - Implantation of an (automatic) implantable cardioverter defibrillator system.
5480	Status post - ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Status post - Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
5490	Status post - Arrhythmia surgery - atrial, Surgical Ablation	Status post - Surgical ablation (any type) of any atrial arrhythmia.
5500	Status post - Arrhythmia surgery - ventricular, Surgical Ablation	Status post - Surgical ablation (any type) of any ventricular arrhythmia.
6500	Status post - Cardiovascular catheterization procedure, Diagnostic	
6520	Status post - Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
6550	Status post - Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
6540	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
6510	Status post - Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
6530	Status post - Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
6410	Status post - Cardiovascular	

- catheterization procedure,
Therapeutic
- 6670 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Adjunctive
therapy
- 6570 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Balloon dilation
- 6590 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Balloon
valvotomy
- 6600 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Coil implantation
- 6610 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Device
implantation
- 6640 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Perforation
(establishing interchamber
and/or intervessel
communication)
- 6580 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Septostomy
- 6620 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Stent insertion
- 6630 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Stent re-dilation
- 6650 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Transcatheter
Fontan completion
- 6660 Status post - Cardiovascular
catheterization procedure,
Therapeutic, Transcatheter
implantation of valve
- 6680 Status post - Cardiovascular
electrophysiological
catheterization procedure
- 6690 Status post - Cardiovascular
electrophysiological

	catheterization procedure, Therapeutic ablation	
5590	Status post - Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)	Status post - Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5600	Status post - Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	Status post - A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
5610	Status post - Shunt, Systemic to pulmonary, Other	Status post - Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
5630	Status post - Shunt, Ligation and takedown	Status post - Takedown of any shunt.
6095	Status post - Shunt, Reoperation	
5640	Status post - PA banding (PAB)	Status post - Placement of a pulmonary artery band, any type.
5650	Status post - PA debanding	Status post - Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
5660	Status post - Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	Status post - In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
5670	Status post - Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Status post - Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
5680	Status post - Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Status post - Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
5690	Status post - Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Status post - Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
5700	Status post - HemiFontan	Status post - A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary

		arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a “dam” between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
6330	Status post - Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
6130	Status post - Superior Cavopulmonary anastomosis(es) + PA reconstruction	
5710	Status post - Palliation, Other	Status post - Any other palliative procedure not specifically listed.
6360	Status post - ECMO cannulation	
6370	Status post - ECMO decannulation	
5910	Status post - ECMO procedure	Status post - Any ECMO procedure (cannulation, decannulation, etc.).
5900	Status post - Intraaortic balloon pump (IABP) insertion	Status post - Insertion of intraaortic balloon pump by any technique.
5920	Status post - Right/left heart assist device procedure	Status post - Any right, left, or biventricular assist device procedure (placement, removal etc.).
6390	Status post - VAD explantation	
6380	Status post - VAD implantation	
6420	Status post - Echocardiography procedure, Sedated transesophageal echocardiogram	
6430	Status post - Echocardiography procedure, Sedated transthoracic echocardiogram	
6435	Status post - Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	

6440	Status post - Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
6450	Status post - Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
6460	Status post - Radiology procedure on cardiac patient, Diagnostic radiology	
6470	Status post - Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
6480	Status post - Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
6490	Status post - Interventional radiology procedure on cardiac patient	
5720	Status post - Aneurysm, Ventricular, Right, Repair	Status post - Repair of right ventricular aneurysm, any technique.
5730	Status post - Aneurysm, Ventricular, Left, Repair	Status post - Repair of left ventricular aneurysm, any technique.
5740	Status post - Aneurysm, Pulmonary artery, Repair	Status post - Repair of pulmonary artery aneurysm, any technique.
5760	Status post - Cardiac tumor resection	Status post - Resection of cardiac tumor, any type.
5780	Status post - Pulmonary AV fistula repair/occlusion	Status post - Repair or occlusion of a pulmonary arteriovenous fistula.
5790	Status post - Ligation, Pulmonary artery	Status post - Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
5802	Status post - Pulmonary embolectomy, Acute pulmonary embolus	Status post - Acute pulmonary embolism (clot) removal, through catheter or surgery.
5804	Status post - Pulmonary embolectomy, Chronic pulmonary embolus	Status post - Chronic pulmonary embolism (clot) removal, through catheter or surgery.
5810	Status post - Pleural drainage procedure	Status post - Pleural drainage procedure via thoracentesis, tube thoracostomy, or open surgical drainage.
5820	Status post - Pleural procedure, Other	Status post - Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc,

		antibiotic or other), among others.
5830	Status post - Ligation, Thoracic duct	Status post - Ligation of the thoracic duct; most commonly for persistent chylothorax.
5840	Status post - Decortication	Status post - Decortication of the lung by any technique.
5850	Status post - Esophageal procedure	Status post - Any procedure performed on the esophagus.
5860	Status post - Mediastinal procedure	Status post - Any non-cardiovascular mediastinal procedure not otherwise listed.
5870	Status post - Bronchoscopy	Status post - Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
5880	Status post - Diaphragm plication	Status post - Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
5890	Status post - Diaphragm procedure, Other	Status post - Any diaphragm procedure not specifically listed.
5930	Status post - VATS (video-assisted thoracoscopic surgery)	Status post - Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
5940	Status post - Minimally invasive procedure	Status post - Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
5950	Status post - Bypass for noncardiac lesion	Status post - Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
5960	Status post - Delayed sternal closure	Status post - Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
5970	Status post - Mediastinal exploration	Status post - Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
5980	Status post - Sternotomy wound drainage	Status post - Drainage of the sternotomy wound.
5990	Status post - Thoracotomy, Other	Status post - Any procedure performed through a thoracotomy incision not otherwise listed.
6000	Status post - Cardiotomy, Other	Status post - Any procedure involving an incision in the heart that is not otherwise listed.

6010	Status post - Cardiac procedure, Other	Status post - Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
6020	Status post - Thoracic and/or mediastinal procedure, Other	Status post - Any thoracic and/or mediastinal procedure not otherwise listed.
6030	Status post - Peripheral vascular procedure, Other	Status post - Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
6040	Status post - Miscellaneous procedure, Other	Status post - Any miscellaneous procedure not otherwise listed.
6050	Status post - Organ procurement	Status post - Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
11777	Status post - Other procedure	Status post - Any procedure on any organ system not otherwise listed.

Long Name: Other Card-Congenital Procedure 1 *SeqNo:* 5340
Short Name: **OCarCongProc1** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the first of the three most significant congenital procedures.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Congenital *Format:* Text (categorical values specified by STS)

ParentShortName: OCarCong *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a device.
2110	ASD repair, Patch + PAPVC repair	
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or

		surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
2300	Valvuloplasty, Common atrioventricular valve	
2250	Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
2230	Valve replacement, Common atrioventricular valve	

210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an

		associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
360	TOF repair, Ventriculotomy, Nontransannular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally

		through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transannular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
430	Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	In the presence of MAPCAs, this code implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization

		procedure may be done on or off bypass.
450	Occlusion MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a valve prosthesis.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair

		with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a valve prosthesis.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other,	Other pulmonic valve surgery not specified in

	Pulmonic	procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit,

		often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manouagian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
790	Aortic stenosis, Supravalvar,	Repair of supravalvar aortic stenosis involving all

	Repair	techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissurotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neo-aortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated

		<p>systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.</p> <p>When coding the procedure “Norwood procedure”, the primary procedure of the operation should be “Norwood procedure”. The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:</p> <ol style="list-style-type: none"> 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery) 3. Shunt, Systemic to pulmonary, Other 4. Conduit placement, RV to PA 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) 8. HemiFontan
880	HLHS biventricular repair	<p>Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.</p>
2160	Hybrid Approach "Stage 1", Application of RPA & LPA bands	<p>A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.</p>
2170	Hybrid Approach "Stage 1", Stent placement in arterial duct (PDA)	<p>A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure”. A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures</p>

- 2180 Hybrid Approach "Stage 1",
Stent placement in arterial
duct (PDA) + application of
RPA & LPA bands
- 2140 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Aortic arch
repair (Norwood [Stage 1] +
Superior Cavopulmonary
anastomosis(es) + PA
Debanding)
- 2150 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic
arch repair
- 890 Transplant, Heart
- 900 Transplant, Heart and lung
- developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
- A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
- A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
- A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures". It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
- Heart transplantation, any technique, allograft or xenograft.
- Heart and lung (single or double) transplantation.

910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	Fontan-type procedure with atrio-pulmonary connection.
960	Fontan, Atrio-ventricular connection	Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
1000	Fontan, TCPC, External conduit, Fenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
1010	Fontan, TCPC, External conduit, Nonfenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
1025	Fontan revision or conversion (Re-do Fontan)	Revision of a previous Fontan procedure to a total cavopulmonary connection.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
2340	Fontan + Atrioventricular valvuloplasty	
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA repair, Atrial switch and Rastelli	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA	Repair of congenitally corrected TGA by VSD closure

	repair, VSD closure	only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
1160	REV	The Lecompte (REV) intraventricular repair is designed

- for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
- 2190 Aortic root translocation over left ventricle (Including Nikaidoh procedure)
- 2210 TGA, Other procedures (Kawashima, LV-PA conduit, other)
- 1180 DORV, Intraventricular tunnel repair
- 1200 DOLV repair
- 1210 Coarctation repair, End to end
- Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
- Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
- Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.

1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.

1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1430	Pectus repair	Repair of pectus excavatum or carinatum by any technique.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	
1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.

1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	
1580	Cardiovascular catheterization procedure, Therapeutic, Coil implantation	
1560	Cardiovascular	

	catheterization procedure, Therapeutic, Device implantation	
2640	Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)	
2580	Cardiovascular catheterization procedure, Therapeutic, Septostomy	
1550	Cardiovascular catheterization procedure, Therapeutic, Stent insertion	
2630	Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	
2650	Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
2660	Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	
2680	Cardiovascular electrophysiological catheterization procedure	
2690	Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation	
1590	Shunt, Systemic to pulmonary, Modified Blalock- Taussig Shunt (MBTS)	Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1600	Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1610	Shunt, Systemic to pulmonary, Other	Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.

1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	
2370	ECMO decannulation	
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump	Insertion of intraaortic balloon pump by any technique.

	(IABP) insertion	
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	
2380	VAD implantation	
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	
2435	Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
2460	Radiology procedure on cardiac patient, Diagnostic radiology	
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
2490	Interventional radiology procedure on cardiac patient	
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.

1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.

1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.

Long Name: Other Card-Congenital Procedure 2 *SeqNo:* 5350
Short Name: **OCarCongProc2** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the second of the three most significant congenital procedures.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Congenital *Format:* Text (categorical values specified by STS)

ParentShortName: OCarCong *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a device.
2110	ASD repair, Patch + PAPVC repair	
50	ASD, Common atrium (single	Septation of common (single) atrium using any type

	atrium), Septation	patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.
2300	Valvuloplasty, Common atrioventricular valve	
2250	Valvuloplasty converted to valve replacement in the same	

	operation, Common atrioventricular valve	
2230	Valve replacement, Common atrioventricular valve	
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.
2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right	

	atrial appendage)	
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
360	TOF repair, Ventriculotomy,	Tetralogy of Fallot repair (assumes VSD closure and

	Nontransannular patch	relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transannular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.
430	Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	In the presence of MAPCAs, this code implies implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA

		conduit.
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a valve prosthesis.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be

		localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary	Excision of the pulmonary valve without placement of a

	(without replacement)	valve prosthesis.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.
690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.

700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.

2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.)). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissurotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.
860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	The Norwood operation is synonymous with the term

- 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neoaortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.
- When coding the procedure "Norwood procedure", the primary procedure of the operation should be "Norwood procedure". The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:
1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS)
 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)
 3. Shunt, Systemic to pulmonary, Other
 4. Conduit placement, RV to PA
 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)
 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)
 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)
 8. HemiFontan
- 880 HLHS biventricular repair
- Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.
- 2160 Hybrid Approach "Stage 1", Application of RPA & LPA bands
- A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional approaches. The term "Hybrid approach" is used somewhat differently than the term "Hybrid Procedure". A "Hybrid approach" is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as "Hybrid approach" are truly "Hybrid Procedures".
- 2170 Hybrid Approach "Stage 1", Stent placement in arterial
- A "Hybrid Procedure" is defined as a procedure that combines surgical and transcatheter interventional

- duct (PDA)
- approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
- 2180 Hybrid Approach "Stage 1",
Stent placement in arterial
duct (PDA) + application of
RPA & LPA bands
- A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
- 2140 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Aortic arch
repair (Norwood [Stage 1] +
Superior Cavopulmonary
anastomosis(es) + PA
Debanding)
- A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”. It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
- 2150 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic
arch repair
- A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”. It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.

890	Transplant, Heart	Heart transplantation, any technique, allograft or xenograft.
900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	Fontan-type procedure with atrio-pulmonary connection.
960	Fontan, Atrio-ventricular connection	Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
1000	Fontan, TCPC, External conduit, Fenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
1010	Fontan, TCPC, External conduit, Nonfenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
1025	Fontan revision or conversion (Re-do Fontan)	Revision of a previous Fontan procedure to a total cavopulmonary connection.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
2340	Fontan + Atrioventricular valvuloplasty	
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA repair, Atrial switch and ASO (double switch)	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA	Repair of congenitally corrected TGA by concomitant

	repair, Atrial switch and Rastelli	atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA repair, VSD closure	Repair of congenitally corrected TGA by VSD closure only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA effecting a “physiological repair”. The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA effecting a “physiological repair”. The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure, Mustard or Senning revision	Revision of a previous atrial baffle procedure (either Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an

- 1160 REV
- LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
- The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
- 2190 Aortic root translocation over left ventricle (Including Nikaidoh procedure)
- 2210 TGA, Other procedures (Kawashima, LV-PA conduit, other)
- 1180 DORV, Intraventricular tunnel repair
- Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
- 1200 DOLV repair
- Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.

1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any) from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging, atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta	

	(AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.
1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1430	Pectus repair	Repair of pectus excavatum or carinatum by any technique.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	

1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	
2590	Cardiovascular catheterization procedure, Therapeutic, Balloon valvotomy	
1580	Cardiovascular	

	catheterization procedure, Therapeutic, Coil implantation	
1560	Cardiovascular catheterization procedure, Therapeutic, Device implantation	
2640	Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)	
2580	Cardiovascular catheterization procedure, Therapeutic, Septostomy	
1550	Cardiovascular catheterization procedure, Therapeutic, Stent insertion	
2630	Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	
2650	Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
2660	Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	
2680	Cardiovascular electrophysiological catheterization procedure	
2690	Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation	
1590	Shunt, Systemic to pulmonary, Modified Blalock- Taussig Shunt (MBTS)	Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1600	Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1610	Shunt, Systemic to pulmonary, Other	Placement of any other systemic-to-pulmonary artery shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.

1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA reconstruction	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	

2370	ECMO decannulation	
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	
2380	VAD implantation	
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	
2435	Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
2460	Radiology procedure on cardiac patient, Diagnostic radiology	
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
2490	Interventional radiology procedure on cardiac patient	
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.
1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.

1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.

1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.

Long Name: Other Card-Congenital Procedure 3 *SeqNo:* 5360
Short Name: **OCarCongProc3** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the third of the three most significant congenital procedures.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Congenital *Format:* Text (categorical values specified by STS)

ParentShortName: OCarCong *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
10	PFO, Primary closure	Suture closure of patent foramen ovale (PFO).
20	ASD repair, Primary closure	Suture closure of secundum (most frequently), coronary sinus, sinus venosus or common atrium ASD.
30	ASD repair, Patch	Patch closure (using any type of patch material) of secundum, coronary sinus, or sinus venosus ASD.
40	ASD repair, Device	Closure of any type ASD (including PFO) using a

		device.
2110	ASD repair, Patch + PAPVC repair	
50	ASD, Common atrium (single atrium), Septation	Septation of common (single) atrium using any type patch material.
60	ASD creation/enlargement	Creation of an atrial septal defect or enlargement of an existing atrial septal defect using a variety of modalities including balloon septostomy, blade septostomy, or surgical septectomy. Creation may be accomplished with or without use of cardiopulmonary bypass.
70	ASD partial closure	Intentional partial closure of any type ASD (partial suture or fenestrated patch closure).
80	Atrial septal fenestration	Creation of a fenestration (window) in the septum between the atrial chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the atrial septum.
85	Atrial fenestration closure	Closure of previously created atrial fenestration using any method including device, primary suture, or patch.
100	VSD repair, Primary closure	Suture closure of any type VSD.
110	VSD repair, Patch	Patch closure (using any type of patch material) of any type VSD.
120	VSD repair, Device	Closure of any type VSD using a device.
130	VSD, Multiple, Repair	Closure of more than one VSD using any method or combination of methods. Further information regarding each type of VSD closed and method of closure can be provided by additionally listing specifics for each VSD closed. In the case of multiple VSDs in which only one is closed the procedure should be coded as closure of a single VSD. The fundamental diagnosis, in this case, would be "VSD, Multiple" and a secondary diagnosis can be the morphological type of VSD that was closed at the time of surgery.
140	VSD creation/enlargement	Creation of a ventricular septal defect or enlargement of an existing ventricular septal defect.
150	Ventricular septal fenestration	Creation of a fenestration (window) in the septum between the ventricular chambers. Usually performed using a hole punch, creating a specifically sized communication in patch material placed on the ventricular septum.
170	AVC (AVSD) repair, Complete (CAVSD)	Repair of complete AV canal (AVSD) using one- or two-patch or other technique, with or without mitral valve cleft repair.
180	AVC (AVSD) repair, Intermediate (Transitional)	Repair of intermediate AV canal (AVSD) using ASD and VSD patch, or ASD patch and VSD suture, or other technique, with or without mitral valve cleft repair.
190	AVC (AVSD) repair, Partial (Incomplete) (PAVSD)	Repair of partial AV canal defect (primum ASD), any technique, with or without repair of cleft mitral valve.

2300	Valvuloplasty, Common atrioventricular valve	
2250	Valvuloplasty converted to valve replacement in the same operation, Common atrioventricular valve	
2230	Valve replacement, Common atrioventricular valve	
210	AP window repair	Repair of AP window using one- or two-patch technique with cardiopulmonary bypass; or, without cardiopulmonary bypass, using transcatheter device or surgical closure.
220	Pulmonary artery origin from ascending aorta (hemitruncus) repair	Repair of pulmonary artery origin from the ascending aorta by direct reimplantation, autogenous flap, or conduit, with or without use of cardiopulmonary bypass.
230	Truncus arteriosus repair	Truncus arteriosus repair that most frequently includes patch VSD closure and placement of a conduit from RV to PA. In some cases, a conduit is not placed but an RV to PA connection is made by direct association. Very rarely, there is no VSD to be closed. Truncal valve repair or replacement should be coded separately (Valvuloplasty, Truncal valve; Valve replacement, Truncal valve), as would be the case as well with associated arch anomalies requiring repair (e.g., Interrupted aortic arch repair).
240	Valvuloplasty, Truncal valve	Truncal valve repair, any type.
2290	Valvuloplasty converted to valve replacement in the same operation, Truncal valve	
250	Valve replacement, Truncal valve	Replacement of the truncal valve with a prosthetic valve.
2220	Truncus + Interrupted aortic arch repair (IAA) repair	
260	PAPVC repair	PAPVC repair revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed.
270	PAPVC, Scimitar, Repair	In scimitar syndrome, PAPVC repair also revolves around whether an intracardiac baffle is created to redirect pulmonary venous return to the left atrium or if the anomalous pulmonary vein is translocated and connected to the left atrium directly. If there is an associated ASD and it is closed, that procedure should also be listed. Occasionally an ASD is created; this procedure also must be listed separately. Concomitant thoracic procedures (e.g., lobectomy, pneumonectomy) should also be included in the procedures listing.

2120	PAPVC repair, Baffle redirection to left atrium with systemic vein translocation (Warden) (SVC sewn to right atrial appendage)	
280	TAPVC repair	Repair of TAPVC, any type. Issues surrounding TAPVC repair involve how the main pulmonary venous confluence anastomosis is fashioned, whether an associated ASD is closed or left open or enlarged (ASD closure and enlargement may be listed separately), and whether, particularly in mixed type TAPVC repair, an additional anomalous pulmonary vein is repaired surgically.
2200	TAPVC repair + Shunt - systemic-to-pulmonary	
290	Cor triatriatum repair	Repair of cor triatriatum. Surgical decision making revolves around the approach to the membrane creating the cor triatriatum defect, how any associated ASD is closed, and how any associated anomalous pulmonary vein connection is addressed. Both ASD closure and anomalous pulmonary venous connection may be listed as separate procedures.
300	Pulmonary venous stenosis repair	Repair of pulmonary venous stenosis, whether congenital or acquired. Repair can be accomplished with a variety of approaches: sutureless, patch venoplasty, stent placement, etc.
310	Atrial baffle procedure (non-Mustard, non-Senning)	The atrial baffle procedure code is used primarily for repair of systemic venous anomalies, as in redirection of left superior vena cava drainage to the right atrium.
330	Anomalous systemic venous connection repair	With the exception of atrial baffle procedures (harvest code 310), anomalous systemic venous connection repair includes a range of surgical approaches, including, among others: ligation of anomalous vessels, reimplantation of anomalous vessels (with or without use of a conduit), or redirection of anomalous systemic venous flow through directly to the pulmonary circulation (bidirectional Glenn to redirect LSVC or RSVC to left or right pulmonary artery, respectively).
340	Systemic venous stenosis repair	Stenosis or obstruction of a systemic vein (most commonly SVC or IVC) may be relieved with patch or conduit placement, excision of the stenotic area with primary reanastomosis or direct reimplantation.
350	TOF repair, No ventriculotomy	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), without use of an incision in the infundibulum of the right ventricle for exposure. In most cases this would be a transatrial and transpulmonary artery approach to repair the VSD and relieve the pulmonary stenosis. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be

		considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
360	TOF repair, Ventriculotomy, Nontransannular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision, but without placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
370	TOF repair, Ventriculotomy, Transannular patch	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with use of a ventriculotomy incision and placement of a trans-pulmonary annulus patch. If the main pulmonary artery incision is extended proximally through the pulmonary annulus, this must be considered "transannular" and thus a ventricular incision, though the length of the incision onto the ventricle itself may be minimal.
380	TOF repair, RV-PA conduit	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with placement of a right ventricle-to-pulmonary artery conduit. In this procedure the major components of pulmonary stenosis are relieved with placement of the RV-PA conduit.
390	TOF - AVC (AVSD) repair	Tetralogy of Fallot repair (assumes VSD closure and relief of pulmonary stenosis at one or more levels), with repair of associated AV canal defect. Repair of associated atrial septal defect or atrioventricular valve repair(s) should be listed as additional or secondary procedures under the primary TOF-AVC procedure.
400	TOF - Absent pulmonary valve repair	Repair of tetralogy of Fallot with absent pulmonary valve complex. In most cases this repair will involve pulmonary valve replacement (pulmonary or aortic homograft, porcine, other) and reduction pulmonary artery arterioplasty.
420	Pulmonary atresia - VSD (including TOF, PA) repair	For patients with pulmonary atresia with ventricular septal defect without MAPCAs, including those with tetralogy of Fallot with pulmonary atresia, repair may entail either a tetralogy-like repair with transannular patch placement, a VSD closure with placement of an RV-PA conduit, or an intraventricular tunnel VSD closure with transannular patch or RV-PA conduit placement. To assure an accurate count of repairs of pulmonary atresia-VSD without MAPCAs, even if a tetralogy-type repair or Rastelli-type repair is used, the pulmonary atresia-VSD code should be the code used, not Rastelli procedure or tetralogy of Fallot repair with transannular patch.

430	Pulmonary atresia - VSD - MAPCA (pseudotruncus) repair	In the presence of MAPCAs, this code implies pulmonary unifocalization (multi- or single-stage), repair of VSD (may be intraventricular tunnel or flat patch VSD closure), and placement of an RV-PA conduit.
440	Unifocalization MAPCA(s)	Anastomosis of aortopulmonary collateral arteries into the left, right, or main pulmonary artery or into a tube graft or other type of confluence. The unifocalization procedure may be done on or off bypass.
450	Occlusion MAPCA(s)	Occlusion, or closing off, of MAPCAs. This may be done with a transcatheter occluding device, usually a coil, or by surgical techniques.
460	Valvuloplasty, Tricuspid	Reconstruction of the tricuspid valve may include but not be limited to a wide range of techniques including: leaflet patch extension, artificial chordae placement, papillary muscle translocation with or without detachment. Annuloplasty techniques that may be done solely or in combination with leaflet, chordae or muscle repair to achieve a competent valve include: eccentric annuloplasty, Kay annular plication, purse-string annuloplasty (including semicircular annuloplasty), sliding annuloplasty, and annuloplasty with ring placement. Do not use this code if tricuspid valve malfunction is secondary to Ebstein's anomaly; instead use the Ebstein's repair procedure code.
2280	Valvuloplasty converted to valve replacement in the same operation, Tricuspid	
465	Ebstein's repair	To assure an accurate count of repairs of Ebstein's anomaly of the tricuspid valve, this procedure code was included. Repair of Ebstein's anomaly may include, among other techniques, repositioning of the tricuspid valve, plication of the atrialized right ventricle, or right reduction atrioplasty. Often associated ASD's may be closed and arrhythmias addressed with surgical ablation procedures. These procedures should be entered as separate procedure codes.
470	Valve replacement, Tricuspid (TVR)	Replacement of the tricuspid valve with a prosthetic valve.
480	Valve closure, Tricuspid (exclusion, univentricular approach)	In a functional single ventricle heart, the tricuspid valve may be closed using a patch, thereby excluding the RV. Tricuspid valve closure may be used for infants with Ebstein's anomaly and severe tricuspid regurgitation or in patients with pulmonary atresia-intact ventricular septum with sinusoids.
490	Valve excision, Tricuspid (without replacement)	Excision of the tricuspid valve without placement of a valve prosthesis.
500	Valve surgery, Other, Tricuspid	Other tricuspid valve surgery not specified in procedure codes.
510	RVOT procedure	Included in this procedural code would be all RVOT

		procedures not elsewhere specified in the nomenclature system. These might be, among others: resection of subvalvar pulmonary stenosis (not DCRV type; may be localized fibrous diaphragm or high infundibular stenosis), right ventricular patch augmentation, or reduction pulmonary artery arterioplasty.
520	1 1/2 ventricular repair	Partial biventricular repair; includes intracardiac repair with bidirectional cavopulmonary anastomosis to volume unload a small ventricle or poorly functioning ventricle.
530	PA, reconstruction (plasty), Main (trunk)	Reconstruction of the main pulmonary artery trunk commonly using patch material. If balloon angioplasty is performed or a stent is placed in the main pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If MPA reconstruction is performed with PA debanding, both codes should be listed.
540	PA, reconstruction (plasty), Branch, Central (within the hilar bifurcation)	Reconstruction of the right or left branch (or both right and left) pulmonary arteries (within the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code. If, rarely, branch PA banding (single or bilateral) was performed in the past and reconstruction is performed associated with debanding, both codes should be listed.
550	PA, reconstruction (plasty), Branch, Peripheral (at or beyond the hilar bifurcation)	Reconstruction of the peripheral right or left branch (or both right and left) pulmonary arteries (at or beyond the hilar bifurcation) commonly using patch material. If balloon angioplasty is performed or a stent is placed in the right or left (or both) peripheral pulmonary artery intraoperatively, this code may be used in addition to the balloon dilation or stent placement code.
570	DCRV repair	Surgical repair of DCRV combines relief of the low infundibular stenosis (via muscle resection) and closure of a VSD when present. A ventriculotomy may be required and is repaired by patch enlargement of the infundibulum. VSD closure and patch enlargement of the infundibulum, if done, should be listed as separate procedure codes.
590	Valvuloplasty, Pulmonic	Valvuloplasty of the pulmonic valve may include a range of techniques including but not limited to: valvotomy with or without bypass, commissurotomy, and valvuloplasty.
2270	Valvuloplasty converted to valve replacement in the same operation, Pulmonic	
600	Valve replacement, Pulmonic (PVR)	Replacement of the pulmonic valve with a prosthetic valve. Care must be taken to differentiate between

		homograft pulmonic valve replacement and placement of a homograft RV-PA conduit.
630	Valve excision, Pulmonary (without replacement)	Excision of the pulmonary valve without placement of a valve prosthesis.
640	Valve closure, Semilunar	Closure of a semilunar valve (pulmonic or aortic) by any technique.
650	Valve surgery, Other, Pulmonic	Other pulmonic valve surgery not specified in procedure codes.
610	Conduit placement, RV to PA	Placement of a conduit, any type, from RV to PA.
620	Conduit placement, LV to PA	Placement of a conduit, any type, from LV to PA.
1774	Conduit placement, Ventricle to aorta	Placement of a conduit from the right or left ventricle to the aorta.
1772	Conduit placement, Other	Placement of a conduit from any chamber or vessel to any vessel, valved or valveless, not listed elsewhere.
580	Conduit reoperation	Conduit reoperation is the code to be used in the event of conduit failure, in whatever position (LV to aorta, LV to PA, RA to RV, RV to aorta, RV to PA, etc.), and from whatever cause (somatic growth, stenosis, insufficiency, infection, etc).
660	Valvuloplasty, Aortic	Valvuloplasty of the aortic valve for stenosis and/or insufficiency including, but not limited to the following techniques: valvotomy (open or closed), commissurotomy, aortic valve suspension, leaflet (left, right or noncoronary) partial resection, reduction, or leaflet shaving, extended valvuloplasty (freeing of leaflets, commissurotomy, and extension of leaflets using autologous or bovine pericardium), or annuloplasty (partial - interrupted or noncircumferential sutures, or complete - circumferential sutures).
2240	Valvuloplasty converted to valve replacement in the same operation, Aortic	
2310	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross procedure	
2320	Valvuloplasty converted to valve replacement in the same operation, Aortic – with Ross-Konno procedure	
670	Valve replacement, Aortic (AVR)	Replacement of the aortic valve with a prosthetic valve (mechanical, bioprosthetic, or homograft). Use this code only if type of valve prosthesis is unknown or does not fit into the specific valve replacement codes available. Autograft valve replacement should be coded as a Ross procedure.
680	Valve replacement, Aortic (AVR), Mechanical	Replacement of the aortic valve with a mechanical prosthetic valve.

690	Valve replacement, Aortic (AVR), Bioprosthetic	Replacement of the aortic valve with a bioprosthetic prosthetic valve.
700	Valve replacement, Aortic (AVR), Homograft	Replacement of the aortic valve with a homograft prosthetic valve.
715	Aortic root replacement, Bioprosthetic	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a bioprosthesis (e.g., porcine) in a conduit, often composite.
720	Aortic root replacement, Mechanical	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a mechanical prosthesis in a composite conduit.
730	Aortic root replacement, Homograft	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) with a homograft.
735	Aortic root replacement, Valve sparing	Replacement of the aortic root (that portion of the aorta attached to the heart; it gives rise to the coronary arteries) without replacing the aortic valve (using a tube graft).
740	Ross procedure	Replacement of the aortic valve with a pulmonary autograft and replacement of the pulmonary valve with a homograft conduit.
750	Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty. Components of the surgery include a longitudinal incision in the aortic septum, a vertical incision in the outflow tract of the right ventricle to join the septal incision, aortic valve replacement, and patch reconstruction of the outflow tracts of both ventricles.
760	Ross-Konno procedure	Relief of left ventricular outflow tract obstruction associated with aortic annular hypoplasia, aortic valvar stenosis and/or aortic valvar insufficiency via Konno aortoventriculoplasty using a pulmonary autograft root for the aortic root replacement.
770	Other annular enlargement procedure	Techniques included under this procedure code include those designed to effect aortic annular enlargement that are not included in other procedure codes. These include the Manougian and Nicks aortic annular enlargement procedures.
780	Aortic stenosis, Subvalvar, Repair	Subvalvar aortic stenosis repair by a range of techniques including excision, excision and myotomy, excision and myomectomy, myotomy, myomectomy, initial placement of apical-aortic conduit (LV to aorta conduit replacement would be coded as conduit reoperation) , Vouhé aortoventriculoplasty (aortic annular incision at commissure of left and right coronary cusps is carried down to the septum and RV infundibulum; septal

		muscle is resected, incisions are closed, and the aortic annulus is reconstituted), or other aortoventriculoplasty techniques.
2100	Aortic stenosis, Subvalvar, Repair, With myectomy for IHSS	
790	Aortic stenosis, Supravalvar, Repair	Repair of supravalvar aortic stenosis involving all techniques of patch aortoplasty and aortoplasty involving the use of all autologous tissue. In simple patch aortoplasty a diamond-shaped patch may be used, in the Doty technique an extended patch is placed (Y-shaped patch, incision carried into two sinuses), and in the Brom repair the ascending aorta is transected, any fibrous ridge is resected, and the three sinuses are patched separately.
800	Valve surgery, Other, Aortic	Other aortic valve surgery not specified in other procedure codes.
810	Sinus of Valsalva, Aneurysm repair	Sinus of Valsalva aneurysm repair can be organized by site of aneurysm (left, right or noncoronary sinus), type of repair (suture, patch graft, or root repair by tube graft or valved conduit), and approach used (from chamber of origin (aorta) or from chamber of penetration (LV, RV, PA, left or right atrium, etc.)). Aortic root replacement procedures in association with sinus of Valsalva aneurysm repairs are usually for associated uncorrectable aortic insufficiency or multiple sinus involvement and the aortic root replacement procedure should also be listed. Additional procedures also performed at the time of sinus of Valsalva aneurysm repair include but are not limited to VSD closure, repair or replacement of aortic valve, and coronary reconstruction; these procedures should also be coded separately from the sinus of Valsalva aneurysm repair.
820	LV to aorta tunnel repair	LV to aorta tunnel repair can be accomplished by suture, patch, or both, and may require reimplantation of the right coronary artery. Associated coronary artery procedures should be coded separately from the LV to aorta tunnel repair.
830	Valvuloplasty, Mitral	Repair of mitral valve including, but not limited to: valvotomy (closed or open heart), cleft repair, annuloplasty with or without ring, chordal reconstruction, commissurotomy, leaflet repair, or papillary muscle repair.
2260	Valvuloplasty converted to valve replacement in the same operation, Mitral	
840	Mitral stenosis, Supravalvar mitral ring repair	Supravalvar mitral ring repair.
850	Valve replacement, Mitral (MVR)	Replacement of mitral valve with prosthetic valve, any kind, in suprannular or annular position.

860	Valve surgery, Other, Mitral	Other mitral valve surgery not specified in procedure codes.
870	Norwood procedure	<p>The Norwood operation is synonymous with the term 'Norwood (Stage 1)' and is defined as an aortopulmonary connection and neo-aortic arch construction resulting in univentricular physiology and pulmonary blood flow controlled with a calibrated systemic-to-pulmonary artery shunt, or a right ventricle to pulmonary artery conduit, or rarely, a cavopulmonary connection.</p> <p>When coding the procedure “Norwood procedure”, the primary procedure of the operation should be “Norwood procedure”. The second procedure (Procedure 2 after the Norwood procedure) must then document the source of pulmonary blood flow and be chosen from the following eight choices:</p> <ol style="list-style-type: none"> 1. Shunt, Systemic to pulmonary, Modified Blalock-Taussig Shunt (MBTS) 2. Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery) 3. Shunt, Systemic to pulmonary, Other 4. Conduit placement, RV to PA 5. Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn) 6. Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn) 7. Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn) 8. HemiFontan
880	HLHS biventricular repair	<p>Performed in patients who have small but adequately sized ventricles to support systemic circulation. These patients usually have small, but not stenotic, aortic and/or mitral valves. Primary biventricular repair has consisted of extensive aortic arch and ascending aorta enlargement with a patch, closure of interventricular and interatrial communications, and conservative approach for left ventricular outflow tract obstruction (which may include mitral stenosis at any level, subaortic stenosis, aortic stenosis, aortic arch hypoplasia, coarctation, or interrupted aortic arch). Concurrent operations (e.g., coarctation repair, aortic valve repair or replacement, etc.) can be coded separately within the database.</p>
2160	Hybrid Approach "Stage 1", Application of RPA & LPA bands	<p>A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly</p>

- “Hybrid Procedures”.
- 2170 Hybrid Approach "Stage 1",
Stent placement in arterial
duct (PDA)
- A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
- 2180 Hybrid Approach "Stage 1",
Stent placement in arterial
duct (PDA) + application of
RPA & LPA bands
- A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”.
- 2140 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Aortic arch
repair (Norwood [Stage 1] +
Superior Cavopulmonary
anastomosis(es) + PA
Debanding)
- A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”. It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
- 2150 Hybrid approach "Stage 2",
Aortopulmonary
amalgamation + Superior
Cavopulmonary
anastomosis(es) + PA
Debanding + Without aortic
arch repair
- A “Hybrid Procedure” is defined as a procedure that combines surgical and transcatheter interventional approaches. The term “Hybrid approach” is used somewhat differently than the term “Hybrid Procedure” . A “Hybrid approach” is defined as any of a group of procedures that fit into the general silo of procedures developed from the combined use of surgical and transcatheter interventional techniques. Therefore, not all procedures classified as “Hybrid approach” are truly “Hybrid Procedures”. It should be acknowledged that a Hybrid approach "Stage 2" (Aortopulmonary amalgamation + Superior Cavopulmonary anastomosis(es) + PA Debanding, with or without Aortic arch repair) gets its name not because it has any

		actual hybrid elements, but because it is part of a planned staged approach that is typically commenced with a hybrid procedure.
890	Transplant, Heart	Heart transplantation, any technique, allograft or xenograft.
900	Transplant, Heart and lung	Heart and lung (single or double) transplantation.
910	Partial left ventriculectomy (LV volume reduction surgery) (Batista)	Wedge resection of LV muscle, with suturing of cut edges together, to reduce LV volume.
920	Pericardial drainage procedure	Pericardial drainage can include a range of therapies including, but not limited to: pericardiocentesis, pericardiostomy tube placement, pericardial window creation, and open pericardial drainage (pericardiotomy).
930	Pericardiectomy	Surgical removal of the pericardium.
940	Pericardial procedure, Other	Other pericardial procedures that include, but are not limited to: pericardial reconstruction for congenital absence of the pericardium, pericardial biopsy, pericardial mass or cyst excision.
950	Fontan, Atrio-pulmonary connection	Fontan-type procedure with atrio-pulmonary connection.
960	Fontan, Atrio-ventricular connection	Fontan-type procedure with atrio-ventricular connection, either direct or with RA-RV conduit, valved or nonvalved.
970	Fontan, TCPC, Lateral tunnel, Fenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with fenestration.
980	Fontan, TCPC, Lateral tunnel, Nonfenestrated	Total cavopulmonary connection using an intraatrial lateral tunnel construction, with no fenestration.
1000	Fontan, TCPC, External conduit, Fenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with fenestration.
1010	Fontan, TCPC, External conduit, Nonfenestrated	Total cavopulmonary connection using an external conduit to connect the infradiaphragmatic systemic venous return to the pulmonary artery, with no fenestration.
1025	Fontan revision or conversion (Re-do Fontan)	Revision of a previous Fontan procedure to a total cavopulmonary connection.
1030	Fontan, Other	Other Fontan procedure not specified in procedure codes. May include takedown of a Fontan procedure.
2340	Fontan + Atrioventricular valvuloplasty	
1035	Ventricular septation	Creation of a prosthetic ventricular septum. Surgical procedure used to septate univentricular hearts with two atrioventricular valves. Additional procedures, such as resection of subpulmonic stenosis, should be listed separately.
1050	Congenitally corrected TGA	Repair of congenitally corrected TGA by concomitant

	repair, Atrial switch and ASO (double switch)	atrial switch (Mustard or Senning) and arterial switch operation. VSD closure is usually performed as well; this should be coded separately.
1060	Congenitally corrected TGA repair, Atrial switch and Rastelli	Repair of congenitally corrected TGA by concomitant atrial switch (Mustard or Senning) and VSD closure to the aortic valve with placement of an RV-to-PA conduit.
1070	Congenitally corrected TGA repair, VSD closure	Repair of congenitally corrected TGA by VSD closure only.
1080	Congenitally corrected TGA repair, VSD closure and LV to PA conduit	Repair of congenitally corrected TGA by VSD closure and placement of an LV-to-PA conduit.
1090	Congenitally corrected TGA repair, Other	Any procedures for correction of CCTGA not otherwise specified in other listed procedure codes.
1110	Arterial switch operation (ASO)	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished.
1120	Arterial switch operation (ASO) and VSD repair	Arterial switch operation is used for repair of transposition of the great arteries (TGA). The pulmonary artery and aorta are transected and translocated so that the pulmonary artery arises from the right ventricle and the aorta from the left ventricle. Coronary artery transfer is also accomplished. The VSD is closed, usually with a patch.
1123	Arterial switch procedure + Aortic arch repair	Concomitant arterial switch operation and repair of the aortic arch in patients with transposition of the great arteries with intact ventricular septum and associated coarctation of the aorta or interrupted aortic arch.
1125	Arterial switch procedure and VSD repair + Aortic arch repair	Concomitant arterial switch operation with VSD closure and repair of aortic arch in patients with transposition of the great arteries with VSD and associated coarctation of the aorta or interrupted aortic arch.
1130	Senning	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while the pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Senning procedure uses atrial wall to construct the baffle.
1140	Mustard	Atrial baffle procedure for rerouting of venous flow in TGA effecting a "physiological repair". The caval flow is directed behind the baffle to the mitral valve, left ventricle and pulmonary artery while pulmonary venous flow is directed in front of the baffle to the tricuspid valve, right ventricle, and aorta. The Mustard procedure uses patch material to construct the baffle.
1145	Atrial baffle procedure,	Revision of a previous atrial baffle procedure (either

	Mustard or Senning revision	Mustard or Senning), for any reason (e.g., obstruction, baffle leak).
1150	Rastelli	Most often used for patients with TGA-VSD and significant LVOTO, the Rastelli operation consists of an LV-to-aorta intraventricular baffle closure of the VSD and placement of an RV-to-PA conduit.
1160	REV	The Lecompte (REV) intraventricular repair is designed for patients with abnormalities of ventriculoarterial connection in whom a standard intraventricular tunnel repair cannot be performed. It is also suitable for patients in whom an arterial switch procedure with tunneling of the VSD to the pulmonary artery cannot be performed because of pulmonary (left ventricular outflow tract) stenosis. A right ventriculotomy incision is made. The infundibular (conal) septum, located between the two semilunar valves, is aggressively resected if its presence interferes with the construction of a tunnel from the VSD to the aorta. The VSD is then tunneled to the aorta. The decision to perform or not to perform the Lecompte maneuver should be made at the beginning of the operation. If the Lecompte maneuver is not performed the pulmonary artery is translocated to the right ventricular outflow tract on the side of the aorta that provides the shortest route. (When the decision to perform the Lecompte maneuver has been made, the great vessels are transected and this maneuver is performed at the beginning of the operation.) The pulmonary artery orifice is then closed. The aorta, if it had been transected during the performance of the Lecompte maneuver, is then reconstructed. A vertical incision is made on the anterior aspect of the main pulmonary artery. The posterior margin of the pulmonary artery is sutured to the superior aspect of the vertical right ventriculotomy incision. A generous patch of autologous pericardium is used to close the inferior portion of the right ventriculotomy and the anterior portion of the pulmonary artery. A monocusp pericardial valve is inserted extemporaneously.
2190	Aortic root translocation over left ventricle (Including Nikaidoh procedure)	
2210	TGA, Other procedures (Kawashima, LV-PA conduit, other)	
1180	DORV, Intraventricular tunnel repair	Repair of DORV using a tunnel closure of the VSD to the aortic valve. This also includes the posterior straight tunnel repair of Kawashima
1200	DOLV repair	Because of the morphologic variability of DOLV, there are many approaches to repair, including: intraventricular tunnel repair directing the VSD to the pulmonary valve, the REV procedure, or the Rastelli

		procedure. In the case of DOLV use this code for tunnel closure to the pulmonary valve. If the REV or Rastelli procedures are performed then use those respective codes.
1210	Coarctation repair, End to end	Repair of coarctation of aorta by excision of the coarctation segment and end-to-end circumferential anastomosis of the aorta.
1220	Coarctation repair, End to end, Extended	Repair of coarctation of the aorta by excision of the coarctation segment and end-to-end anastomosis of the oblique ends of the aorta, creating an extended anastomosis.
1230	Coarctation repair, Subclavian flap	Repair of coarctation of the aorta by ligating, dividing, and opening the subclavian artery, incising the coarctation site, and folding down the subclavian artery onto the incision in the aorta, suturing the subclavian "flap" in place, creating a roof over the area of the previous coarctation.
1240	Coarctation repair, Patch aortoplasty	Repair of coarctation of the aorta by incising the coarctation site with placement of a patch sutured in place longitudinally along the aortotomy edge.
1250	Coarctation repair, Interposition graft	Repair of coarctation of the aorta by resection of the coarctation segment and placement of a prosthetic tubular interposition graft anastomosed circumferentially to the cut ends of the aorta.
1260	Coarctation repair, Other	Any repair of coarctation not specified in procedure codes. This may include, for example, a combination of two approaches for coarctation repair or extra-anatomic bypass graft, etc.
1275	Coarctation repair + VSD repair	Coarctation of aorta repair, any technique, and simultaneous VSD repair, any type VSD, any type repair.
1280	Aortic arch repair	Aortic arch repair, any technique.
1285	Aortic arch repair + VSD repair	Aortic arch repair, any technique, and simultaneous VSD repair, any type VSD, any type repair. This includes repair of IAA with VSD.
1290	Coronary artery fistula ligation	Coronary artery fistula repair using any technique. If additional technique information may be supplied by another procedure code, please list separately (e.g., bypass graft).
1291	Anomalous origin of coronary artery from pulmonary artery repair	Repair of anomalous origin of the coronary artery (any from the pulmonary artery, by any technique (ligation, translocation with aortic implantation, Takeuchi operation, bypass graft). If additional technique information may be supplied by another procedure code, please list separately (for example, bypass graft).
1300	Coronary artery bypass	Coronary artery bypass graft procedure, any technique (with or without CPB, venous or arterial graft, one or more grafts, etc.), for any coronary artery pathology (coronary arterial fistula, aneurysm, coronary bridging,

		atresia of left main, acquired coronary artery disease, etc.).
1305	Anomalous aortic origin of coronary artery from aorta (AAOCA) repair	
1310	Coronary artery procedure, Other	Any coronary artery procedure not specifically listed.
1320	Interrupted aortic arch repair	Repair of interrupted aortic arch (any type) by any technique (direct anastomosis, prosthetic graft, etc). Does not include repair of IAA-VSD.
1330	PDA closure, Surgical	Closure of a PDA by any surgical technique (ligation, division, clip) using any approach (i.e., thoracotomy, thoracoscopic, etc).
1340	PDA closure, Device	Closure of a PDA by device using transcatheter techniques.
1360	Vascular ring repair	Repair of vascular ring (any type, except pulmonary artery sling) by any technique.
1365	Aortopexy	Surgical fixation of the aorta to another structure (usually the posterior aspect of the sternum) to relieve compression on another vessel or structure (e.g., trachea).
1370	Pulmonary artery sling repair	Pulmonary artery sling repair by any technique.
1380	Aortic aneurysm repair	Aortic aneurysm repair by any technique.
1390	Aortic dissection repair	Aortic dissection repair by any technique.
1400	Lung biopsy	Lung biopsy, any technique.
1410	Transplant, lung(s)	Lung or lobe transplantation of any type.
1420	Lung procedure, Other	Included in this procedure code would be any lung procedure other than transplant, such as, but not limited to: pneumonectomy (left or right), lobectomy (any lobe), bilobectomy (two lobes), segmental lung resection (any segment), or wedge resection.
1430	Pectus repair	Repair of pectus excavatum or carinatum by any technique.
1440	Tracheal procedure	Any tracheal procedure, including but not limited to relief of tracheal stenosis (any means including pericardial graft, autograft insertion, homograft insertion, resection with reanastomosis, rib cartilage insertion, or slide tracheoplasty). Tracheal stent placement or balloon dilation should be coded separately.
1450	Pacemaker implantation, Permanent	Implantation of a permanent pacemaker of any type (e.g., single-chamber, dual-chamber, atrial antitachycardia), with any lead configuration or type (atrial, ventricular, atrial and ventricular, transvenous, epicardial, transmural), by any technique (sternotomy, thoracotomy etc).
1460	Pacemaker procedure	Any revision to a previously placed pacemaker system

		including revisions to leads, generators, pacemaker pockets. This may include explantation of pacemakers or leads as well.
2350	Explantation of pacing system	
1470	ICD (AICD) implantation	Implantation of an (automatic) implantable cardioverter defibrillator system.
1480	ICD (AICD) ([automatic] implantable cardioverter defibrillator) procedure	Any revision to a previously placed AICD including revisions to leads, pads, generators, pockets. This may include explantation procedures as well.
1490	Arrhythmia surgery - atrial, Surgical Ablation	Surgical ablation (any type) of any atrial arrhythmia.
1500	Arrhythmia surgery - ventricular, Surgical Ablation	Surgical ablation (any type) of any ventricular arrhythmia.
2500	Cardiovascular catheterization procedure, Diagnostic	
2520	Cardiovascular catheterization procedure, Diagnostic, Angiographic data obtained	
2550	Cardiovascular catheterization procedure, Diagnostic, Electrophysiology alteration	
2540	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic alteration	
2510	Cardiovascular catheterization procedure, Diagnostic, Hemodynamic data obtained	
2530	Cardiovascular catheterization procedure, Diagnostic, Transluminal test occlusion	
2410	Cardiovascular catheterization procedure, Therapeutic	
2670	Cardiovascular catheterization procedure, Therapeutic, Adjunctive therapy	
1540	Cardiovascular catheterization procedure, Therapeutic, Balloon dilation	
2590	Cardiovascular	

	catheterization procedure, Therapeutic, Balloon valvotomy	
1580	Cardiovascular catheterization procedure, Therapeutic, Coil implantation	
1560	Cardiovascular catheterization procedure, Therapeutic, Device implantation	
2640	Cardiovascular catheterization procedure, Therapeutic, Perforation (establishing interchamber and/or intervessel communication)	
2580	Cardiovascular catheterization procedure, Therapeutic, Septostomy	
1550	Cardiovascular catheterization procedure, Therapeutic, Stent insertion	
2630	Cardiovascular catheterization procedure, Therapeutic, Stent re-dilation	
2650	Cardiovascular catheterization procedure, Therapeutic, Transcatheter Fontan completion	
2660	Cardiovascular catheterization procedure, Therapeutic, Transcatheter implantation of valve	
2680	Cardiovascular electrophysiological catheterization procedure	
2690	Cardiovascular electrophysiological catheterization procedure, Therapeutic ablation	
1590	Shunt, Systemic to pulmonary, Modified Blalock- Taussig Shunt (MBTS)	Placement of a tube graft from a branch of the aortic arch to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1600	Shunt, Systemic to pulmonary, Central (from aorta or to main pulmonary artery)	A direct anastomosis or placement of a tube graft from the aorta to the pulmonary artery with or without bypass, from any approach (thoracotomy, sternotomy).
1610	Shunt, Systemic to	Placement of any other systemic-to-pulmonary artery

	pulmonary, Other	shunt, with or without bypass, from any approach (thoracotomy, sternotomy) that is not otherwise coded. Includes classic Blalock-Taussig systemic-to-pulmonary artery shunt.
1630	Shunt, Ligation and takedown	Takedown of any shunt.
2095	Shunt, Reoperation	
1640	PA banding (PAB)	Placement of a pulmonary artery band, any type.
1650	PA debanding	Debanding of pulmonary artery. Please list separately any pulmonary artery reconstruction required.
1660	Damus-Kaye-Stansel procedure (DKS) (creation of AP anastomosis without arch reconstruction)	In the Damus-Kaye-Stansel procedure the proximal transected main pulmonary artery is connected by varying techniques to the aorta.
1670	Bidirectional cavopulmonary anastomosis (BDCPA) (bidirectional Glenn)	Superior vena cava to pulmonary artery anastomosis allowing flow to both pulmonary arteries with an end-to-side superior vena-to-pulmonary artery anastomosis.
1680	Glenn (unidirectional cavopulmonary anastomosis) (unidirectional Glenn)	Superior vena cava to ipsilateral pulmonary artery anastomosis (i.e., LSVC to LPA, RSVC to RPA).
1690	Bilateral bidirectional cavopulmonary anastomosis (BBDCPA) (bilateral bidirectional Glenn)	Bilateral superior vena cava-to-pulmonary artery anastomoses (requires bilateral SVCs).
1700	HemiFontan	A HemiFontan is an operation that includes a bidirectional superior vena cava (SVC)-to-pulmonary artery anastomosis and the connection of this "SVC-pulmonary artery amalgamation" to the atrium, with a "dam" between this "SVC-pulmonary artery amalgamation" and the atrium. This operation can be accomplished with a variety of operative strategies including the following two techniques and other techniques that combine elements of both of these approaches: (1) Augmenting both branch pulmonary arteries with a patch and suturing the augmented branch pulmonary arteries to an incision in the medial aspect of the superior vena cava. (With this approach, the pulmonary artery patch forms a roof over the SVC-to-pulmonary artery anastomosis and also forms a "dam" between the SVC-pulmonary artery amalgamation and the right atrium.) (2) Anastomosing both ends of the divided SVC to incisions in the top and bottom of the right pulmonary artery, and using a separate patch to close junction of the SVC and the right atrium.
2330	Superior cavopulmonary anastomosis(es) (Glenn or HemiFontan) + Atrioventricular valvuloplasty	
2130	Superior Cavopulmonary anastomosis(es) + PA	

	reconstruction	
1710	Palliation, Other	Any other palliative procedure not specifically listed.
2360	ECMO cannulation	
2370	ECMO decannulation	
1910	ECMO procedure	Any ECMO procedure (cannulation, decannulation, etc.).
1900	Intraaortic balloon pump (IABP) insertion	Insertion of intraaortic balloon pump by any technique.
1920	Right/left heart assist device procedure	Any right, left, or biventricular assist device procedure (placement, removal etc.).
2390	VAD explantation	
2380	VAD implantation	
2420	Echocardiography procedure, Sedated transesophageal echocardiogram	
2430	Echocardiography procedure, Sedated transthoracic echocardiogram	
2435	Non-cardiovascular, Non-thoracic procedure on cardiac patient with cardiac anesthesia	
2440	Radiology procedure on cardiac patient, Cardiac Computerized Axial Tomography (CT Scan)	
2450	Radiology procedure on cardiac patient, Cardiac Magnetic Resonance Imaging (MRI)	
2460	Radiology procedure on cardiac patient, Diagnostic radiology	
2470	Radiology procedure on cardiac patient, Non-Cardiac Computerized Tomography (CT) on cardiac patient	
2480	Radiology procedure on cardiac patient, Non-cardiac Magnetic Resonance Imaging (MRI) on cardiac patient	
2490	Interventional radiology procedure on cardiac patient	
1720	Aneurysm, Ventricular, Right, Repair	Repair of right ventricular aneurysm, any technique.
1730	Aneurysm, Ventricular, Left, Repair	Repair of left ventricular aneurysm, any technique.

1740	Aneurysm, Pulmonary artery, Repair	Repair of pulmonary artery aneurysm, any technique.
1760	Cardiac tumor resection	Resection of cardiac tumor, any type.
1780	Pulmonary AV fistula repair/occlusion	Repair or occlusion of a pulmonary arteriovenous fistula.
1790	Ligation, Pulmonary artery	Ligation or division of the pulmonary artery. Most often performed as a secondary procedure.
1802	Pulmonary embolectomy, Acute pulmonary embolus	Acute pulmonary embolism (clot) removal, through catheter or surgery.
1804	Pulmonary embolectomy, Chronic pulmonary embolus	Chronic pulmonary embolism (clot) removal, through catheter or surgery.
1810	Pleural drainage procedure	Pleural drainage procedure via thoracocentesis, tube thoracostomy, or open surgical drainage.
1820	Pleural procedure, Other	Other pleural procedures not specifically listed; may include pleurodesis (mechanical, talc, antibiotic or other), among others.
1830	Ligation, Thoracic duct	Ligation of the thoracic duct; most commonly for persistent chylothorax.
1840	Decortication	Decortication of the lung by any technique.
1850	Esophageal procedure	Any procedure performed on the esophagus.
1860	Mediastinal procedure	Any non-cardiovascular mediastinal procedure not otherwise listed.
1870	Bronchoscopy	Bronchoscopy, rigid or flexible, for diagnostic, biopsy, or treatment purposes (laser, stent, dilation, lavage).
1880	Diaphragm plication	Plication of the diaphragm; most often for diaphragm paralysis due to phrenic nerve injury.
1890	Diaphragm procedure, Other	Any diaphragm procedure not specifically listed.
1930	VATS (video-assisted thoracoscopic surgery)	Video-assisted thoracoscopic surgery utilized; this code should be used in addition to the specific procedure code (e.g., if PDA ligated using VATS technique, PDA ligation should be primary procedure, VATS should be secondary procedure).
1940	Minimally invasive procedure	Any procedure using minimally invasive technique; this code should be used in addition to the specific procedure code (e.g., if ASD closed using minimally invasive technique, ASD repair should be primary procedure, minimally invasive procedure should be listed additionally).
1950	Bypass for noncardiac lesion	Use of cardiopulmonary bypass for noncardiac lesion; this code may be used in addition to the specific procedure code if one is available (e.g., tracheal procedures may be done using CPB - the tracheal procedure should be the primary procedure and use of cardiopulmonary bypass for noncardiac lesion should be listed additionally).
1960	Delayed sternal closure	Sternal closure effected after patient has left operating

		room with sternum open, either because of swelling or electively after complex heart procedures. This procedure should be operative type No CPB Cardiovascular.
1970	Mediastinal exploration	Mediastinal exploration, most often for postoperative control of bleeding or tamponade, but may be exploration to assess mediastinal mass, etc.
1980	Sternotomy wound drainage	Drainage of the sternotomy wound.
1990	Thoracotomy, Other	Any procedure performed through a thoracotomy incision not otherwise listed.
2000	Cardiotomy, Other	Any procedure involving an incision in the heart that is not otherwise listed.
2010	Cardiac procedure, Other	Any cardiac procedure, bypass or non-bypass, that is not otherwise listed.
2020	Thoracic and/or mediastinal procedure, Other	Any thoracic and/or mediastinal procedure not otherwise listed.
2030	Peripheral vascular procedure, Other	Any peripheral vascular procedure; may include procedures such as femoral artery repair, iliac artery repair, etc.
2040	Miscellaneous procedure, Other	Any miscellaneous procedure not otherwise listed.
2050	Organ procurement	Procurement of an organ for transplant (most likely, heart, lungs, or heart and lungs).
7777	Other procedure	Any procedure on any organ system not otherwise listed.

Long Name: Other Card-Transmyocardial Laser Revascularization *SeqNo:* 5370
Short Name: **OCarLasr** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient underwent the creation of multiple channels in left ventricular myocardium with a laser fiber either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFFIELD:* No
ModelField: No *PQRIFIELD:* Yes

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Cardiac Trauma *SeqNo:* 5380
Short Name: **OCarTrma** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a surgical procedure for an injury due to Cardiac Trauma either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Other Card-Card Tx *SeqNo:* 5390
Short Name: **OCarCrTx** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a Heterotopic or Orthotopic heart transplantation either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Other Card-Arrhythmia Correction Surgery *SeqNo:* 5400
Short Name: **OCarACD** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate which arrhythmia correction device was surgically placed either in conjunction with, or as the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	None	
2	Permanent Pacemaker	An internal electronic generator that controls the heart rate.
3	Permanent Pacemaker with Cardiac Resynchronization Technique (CRT)	An internal permanent pacemaker that uses biventricular electrical stimulation to synchronize ventricular contraction.
4	Implantable Cardioverter Defibrillator (ICD)	An internal device that defibrillates the heart.
5	ICD with CRT	An internal AICD that uses biventricular electrical stimulation to synchronize ventricular contraction.

<i>Long Name:</i>	Other Card-Arrhythmia Correction Surgery-Lead Placement	<i>SeqNo:</i>	5420
<i>Short Name:</i>	OCarACDL	<i>Core:</i>	No
<i>Section Name:</i>	Other Cardiac Procedures	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate which lead placement was used for the permanent pacemaker with CRT or AICD with CRT: Epicardial: the outer most layer of the heart. Endocardial: the inner most layer of the heart.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	Other Card-Arrhythmia Correction Surgery	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	OCarACD	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Permanent Pacemaker with Cardiac Resynchronization Technique (CRT)" or "AICD with CRT"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Epicardial	
	2	Endocardial	

<i>Long Name:</i>	Other Card-Arrhythmia Correction Surgery-Lead Extraction	<i>SeqNo:</i>	5430
<i>Short Name:</i>	OCarACDLE	<i>Core:</i>	Yes
<i>Section Name:</i>	Other Cardiac Procedures	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether procedure included lead extraction for a device intended to treat cardiac arrhythmias.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	
		<i>NQFField:</i>	
		<i>ModelField:</i>	
		<i>PQRIField:</i>	
<i>Parent Long Name:</i>	Other Card	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	OpOCard	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	

- 1 Yes
- 2 No

Long Name: Other Card-Atrial Fibrillation Correction Surgery *SeqNo:* 5440
Short Name: **OCarAFib** *Core:* No
Section Name: Other Cardiac Procedures *Harvest:* No

DBTableName AdultData

Definition: Indicate if one of the following atrial fibrillation correction surgeries was performed either in conjunction with, or as the primary surgical procedure. The intent of both surgeries is to preclude the atria from fibrillating by disrupting the abnormal reentry pathways of electronic signals that lead to atrial fibrillation.

Standard Surgical Maze Procedure: Surgical procedure in which full thickness incisions are made in the atria of the heart. Sutures are then used to reapproximate the incised tissue. The resulting lesion disrupts the abnormal reentry pathways of electronic signals that lead to atrial fibrillation.

Other Surgical Ablative Procedure: Surgical procedure in which lesions are created in the atria of the heart by an energy source. The lesion disrupts the abnormal reentry pathways of electronic signals that lead to atrial fibrillation.

Combination of Standard Surgical Maze Procedure and Other Surgical Ablative Procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|--|
| 1 | None |
| 2 | Standard Surgical Maze Procedure |
| 3 | Other Surgical Ablative Procedure |
| 4 | Combination of Standard and Other Procedures |

Long Name: Other Card-Atrial Fibrillation Surgical Procedure *SeqNo:* 5450
Short Name: **OCarAFibSur** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether atrial fibrillation correction surgery was performed as the primary procedure or in conjunction with another procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Location *SeqNo:* 5451
Short Name: **OCarAFibSurLoc** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the location of the AFib ablation procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OCarAFibSur *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Biatrial
2	Left atrial only
3	Right atrial only

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Left Atrial Appendage Obliterated *SeqNo:* 5452

Short Name: **OCarAFibSurLAA** *Core:* Yes

Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether left atrial appendage was obliterated. Includes oversewing, ligation, stapling, clipping, and/or plication.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OCarAFibSur *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Radio Frequency *SeqNo:* 5455

Short Name: **OCarAFibMethRad** *Core:* Yes

Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included radio frequency.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OCarAFibSur *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Ultrasound *SeqNo:* 5456
Short Name: **OCarAFibMethUltra** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included ultrasound.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)
ParentShortName: OCarAFibSur *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Cryo *SeqNo:* 5457
Short Name: **OCarAFibMethCryo** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included cryo.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)
ParentShortName: OCarAFibSur *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Microwave *SeqNo:* 5458

Short Name: **OCarAFibMethMicro** *Core:* Yes

Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included microwave.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OCarAFibSur *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Laser *SeqNo:* 5459

Short Name: **OCarAFibMethLas** *Core:* Yes

Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included laser.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OCarAFibSur *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Other Card-Atrial Fibrillation Surgical Procedure-Method of Lesion Creation - Cut-And-Sew *SeqNo:* 5460

Short Name: **OCarAFibMethCAS** *Core:* Yes

Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the method used to create the lesion for the AFib ablation procedure included cut-and-sew.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OCarAFibSur *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Atrial Fibrillation Ablation Procedure *SeqNo:* 5465

Short Name: **OCarAFibAProc** *Core:* Yes

Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate what atrial fibrillation ablation procedure was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*

ModelField: *PQRIField:*

Parent Long Name: Other Card-Atrial Fibrillation Surgical Procedure *Format:* Text (categorical values specified by STS)

ParentShortName: OCarAFibSur *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

<u>Code:</u>	<u>Value:</u>	<u>Definition:</u>
1	Primarily epicardial procedure	E.g., pulmonary vein isolation with or without connection to left atrial appendage
2	Primarily intracardiac	E.g., Maze procedures; lesions to mitral annulus; etc.

procedure

Long Name: Other Card-Ao Aneur *SeqNo:* 5470
Short Name: **ONCAoAn** *Core:* No
Section Name: Other Cardiac Procedures *Harvest:* No
DBTableName AdultData
Definition: Indicate whether the patient underwent an aortic aneurysm repair either in conjunction with, or as the primary surgical procedure. This includes dissections, non-dissections and ruptures of the aorta.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)
ParentShortName: OpOCard *DataLength:*
ParentValue: = "Yes" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 Yes
 2 No

Long Name: Other Card-Aortic Procedure Type *SeqNo:* 5471
Short Name: **OCAoProcType** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the type of aortic procedure performed in conjunction with another procedure or as the primary procedure.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)
ParentShortName: OpOCard *DataLength:*
ParentValue: = "Yes" *Data Source:* User

 Harvest Codes:
 Code: Value:
 1 None
 2 Aneurysm
 3 Dissection (including

- intramural hematoma)
- 4 Trauma
- 5 Coarctation
- 6 Other

Long Name: Other Card-Aortic Root *SeqNo:* 5473
Short Name: **ONCAoRt** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of an aortic root aneurysm either in conjunction with, or as the primary surgical procedure. Aneurysm refers to pathologic dilatation of the aorta.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*

ParentValue: = "Aneurysm" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Other Card-Aortic Root Graft *SeqNo:* 5474
Short Name: **ONCAoGraft** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a Dacron graft was used to replace the ascending aorta (between the sinotubular junction and the origin of the innominate artery) – this includes a “hemiarch” replacement as well as a Wheat procedure. Also includes valve-sparing root reimplantation and remodeling operations. If the ascending aorta was replaced with a Dacron graft, record as “yes” and also go to AVR section and record device model, size, etc. there.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Aortic Root *Format:* Text (categorical values specified by STS)

ParentShortName: ONCAoRt *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Asc *SeqNo:* 5480
Short Name: **ONCAAsc** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of ascending aortic aneurysm either in conjunction with, or as the primary surgical procedure. Aneurysm refers to pathologic dilatation of the aorta. The ascending aorta begins at the aortic annulus and ends at the origin of the innominate artery where the aorta continues as the transverse arch.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*
ParentValue: = "Aneurysm" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes

2 No

Long Name: Other Card-Arch *SeqNo:* 5490
Short Name: **ONCArch** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of aneurysm in the arch of the aorta either in conjunction with, or as the primary surgical procedure. The arch begins at the origin of the innominate artery and ends beneath the left subclavian artery. It is the portion of the aorta at the top of the heart that gives off three important blood vessels; the innominate artery, the left carotid artery and the left subclavian artery.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*

ParentValue: = "Aneurysm" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes
 2 No

Long Name: Other Card-Arch Repair Extent *SeqNo:* 5491
Short Name: **ONCArchRepExt** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the extent of the arch repair.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Arch *Format:* Text (categorical values specified by STS)

ParentShortName: ONCArch *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Hemi-Arch

2 Total Arch

Long Name: Other Card-Desc *SeqNo:* 5500
Short Name: **ONCDesc** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of a descending aortic aneurysm either in conjunction with, or as the primary surgical procedure. The descending aorta is the portion of the aorta between the arch and the abdomen.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*

ParentValue: = "Aneurysm" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Thoracoabdominal Aneurysm *SeqNo:* 5510
Short Name: **ONCThAbd** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate if the patient underwent repair of a thoracoabdominal aneurysm either in conjunction with, or as the primary surgical procedure. Thoracoabdominal aneurysms can involve the entire thoracoabdominal aorta from the origin of the left subclavian artery to the aortic bifurcation or can involve only one or more segments of the abdominal aorta.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*

ParentValue: = "Aneurysm" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes

2 No

Long Name: Other Card-Thoracoabdominal Graft Replacement *SeqNo:* 5511
Short Name: **ONCThAbdGraft** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether a graft replacement was used.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Thoracoabdominal Aneurysm *Format:* Text (categorical values specified by STS)

ParentShortName: ONCThAbd *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes
 2 No

Long Name: Other Card-Thoracoabdominal-Intercostal Vessels *SeqNo:* 5512
Short Name: **ONCThAbdInterVes** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether intercostal vessels were re-implanted.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Thoracoabdominal Graft Replacement *Format:* Text (categorical values specified by STS)

ParentShortName: ONCThAbdGraft *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes
 2 No

Long Name: Other Card-Thoracoabdominal-CSF Drainage *SeqNo:* 5513
Short Name: **ONCThAbdLumCSF** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether lumbar CSF drainage was utilized.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Thoracoabdominal Graft Replacement *Format:* Text (categorical values specified by STS)

ParentShortName: ONCThAbdGraft *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Other Card-Thoracoabdominal-Extent Replaced *SeqNo:* 5514
Short Name: **ONCThAbdExtent** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate extent of descending aorta replacement.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Thoracoabdominal Graft Replacement *Format:* Text (categorical values specified by STS)

ParentShortName: ONCThAbdGraft *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|-------------------------|
| 1 | Proximal |
| 2 | Mid |
| 3 | Distal |
| 4 | Proximal - Mid |
| 5 | Proximal - Mid - Distal |

6 Mid - Distal

Long Name: Other Card-Aortic Dissection-Acute *SeqNo:* 5516
Short Name: **AoDisAc** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether aortic dissection is acute (<14 days prior to procedure).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*

ParentValue: = "Dissection (including intramural hematoma)" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Other Card-Aortic Dissection Type *SeqNo:* 5517
Short Name: **AoDisTyp** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes
DBTableName AdultData

Definition: Indicate aortic dissection type.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*

ParentValue: = "Dissection (including intramural hematoma)" *Data Source:* User

Harvest Codes and Value Definitions:

Code: Value:

- 1 Stanford Type A
- 2 Stanford Type B

Definition:

- Dissection extends proximal to the left subclavian artery
- Dissection extends distal to the left subclavian artery

Long Name: Other Card-Aortic Trauma type *SeqNo:* 5518
Short Name: **AoTrTyp** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate type of aortic trauma.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Aortic Procedure Type *Format:* Text (categorical values specified by STS)

ParentShortName: OCAoProcType *DataLength:*

ParentValue: = "Trauma" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Blunt
- 2 Penetrating

Long Name: Other Card-Endovascular Procedure (TEVAR): *SeqNo:* 5520
Short Name: **EndoProc** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether an aortic endovascular stent graft was performed/deployed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

Long Name: Other Card-Endovascular Debranching *SeqNo:* 5521
Short Name: **EndoProcDeb** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether debranching was performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card-Endovascular Procedure (TEVAR) *Format:* Text (categorical values specified by STS)

ParentShortName: EndoProc *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Card-Tumor *SeqNo:* 5530
Short Name: **OCTumor** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had resection of an intracardiac tumor.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	None
2	Myxoma
3	Fibroelastoma
4	Hypernephroma
5	Sarcoma
6	Other

Long Name: Other Card-Pulmonary Thromboembolctomy *SeqNo:* 5540
Short Name: **OCPulThromDis** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had surgery for pulmonary thromboembolic disease.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 None
- 2 Yes, Acute
- 3 Yes, Chronic

Long Name: Other Card-Other *SeqNo:* 5550
Short Name: **OCarOthr** *Core:* Yes
Section Name: Other Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had an other cardiac procedure performed either in conjunction with, or as the primary surgical procedure that is not included within this section. Includes, but is not limited to those procedures listed on the STS Data Manager's section of the STS Web Site.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: Other Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpOCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
 - 2 No
-

Long Name: Other Non Card-Caro Endart *SeqNo:* 5560
Short Name: **ONCCarEn** *Core:* Yes
Section Name: Other Non-Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient underwent surgical removal of stenotic atheromatous plaque or percutaneous/surgical placement of carotid stent in conjunction with the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Non Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpONCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Non Card-Other Vasc *SeqNo:* 5570
Short Name: **ONCOVasc** *Core:* Yes
Section Name: Other Non-Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient had procedures treating peripheral vascular disease in conjunction with the primary surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Non Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpONCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Other Non Card-Other Thor *SeqNo:* 5580
Short Name: **ONCOThor** *Core:* Yes
Section Name: Other Non-Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient underwent procedures involving Thorax/Pleura in conjunction with the primary surgical procedure. This includes but is not limited to open lung biopsy, lung resection, mediastinal mass and/or lung dissection.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Non Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpONCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Other Non Card-Other *SeqNo:* 5590
Short Name: **ONCOther** *Core:* Yes
Section Name: Other Non-Cardiac Procedures *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had any other non-cardiac procedure performed in conjunction with the primary surgical procedure that is not included within this section.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Other Non Card *Format:* Text (categorical values specified by STS)

ParentShortName: OpONCard *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Postoperative Creatinine Level *SeqNo:* 5610
Short Name: **PostCreat** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the postoperative Creatinine level. If more than one level is obtained, code the highest level.

LowValue: 0.1 *UsualRangeLow:* 0.1 *ACCField:* Not mapped
HighValue: 30.0 *UsualRangeHigh:* 9.0 *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: Blood Prod *SeqNo:* 5620
Short Name: **BldProd** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether blood products were transfused any time postoperatively. Postoperatively is defined as any blood started after the initial surgery. Include blood transfused after the initial surgery, including any blood transfused during a reoperative surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Blood Prod - RBC Units *SeqNo:* 5630
Short Name: **BdRBCU** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of packed red blood cells that were transfused any time postoperatively.

Do not include autologous, cell-saver or chest tube recirculated blood.

LowValue: 0 *UsualRangeLow:* 0 *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* 10 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Blood Prod *Format:* Integer
ParentShortName: BldProd *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Blood Prod - FFP Units *SeqNo:* 5640
Short Name: **BdFFPU** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of fresh frozen plasma that were transfused any time postoperatively.

LowValue: 0 *UsualRangeLow:* 0 *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* 10 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Blood Prod *Format:* Integer
ParentShortName: BldProd *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Blood Prod - Cryo Units *SeqNo:* 5650
Short Name: **BdCryoU** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of cryoprecipitate that were transfused intraoperatively.

One bag of cryo = one unit.

The number of units is not volume dependent.

LowValue: 0 *UsualRangeLow:* 0 *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* 10 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Blood Prod *Format:* Integer

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Blood Prod - Platelet Units *SeqNo:* 5660
Short Name: **BdPlatU** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of units of platelets that were transfused intraoperatively.

Count the dose pack as one unit. A dose pack may consist of 4, 6, 8, 10, or any number of donor platelets obtained. The number of units coded is not volume dependent.

LowValue: 0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 99 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Blood Prod *Format:* Integer

ParentShortName: BldProd *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Long Name: Extubated In OR *SeqNo:* 5670
Short Name: **ExtubOR** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was extubated prior to leaving the operating room during the initial surgery.

If patient expires in the operating room during the initial surgery, answer "Yes".

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Re-intubated During Hospital Stay *SeqNo:* 5680
Short Name: **ReIntub** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was reintubated during the hospital stay after the initial extubation.

This may include patients who have been extubated in the OR and require intubation in the postoperative period.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Additional Hours Ventilated *SeqNo:* 5690
Short Name: **VentHrsA** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate how many additional hours the patient was on ventilator after initial extubation.
LowValue: 0.1 *UsualRangeLow:* 1.0 *ACCField:* Not mapped
HighValue: 5000.0 *UsualRangeHigh:* 168.0 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: Re-intubated During Hospital Stay *Format:* Real
ParentShortName: ReIntub *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: ICU Visit *SeqNo:* 5700
Short Name: **ICUVisit** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the patient received ICU level of care immediately following the initial surgery. Include ICU unit, post-anesthesia recovery, and other similar critical care environments.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes
2	No

<i>Long Name:</i> Initial ICU hours	<i>SeqNo:</i> 5710
<i>Short Name:</i> ICUInHrs	<i>Core:</i> Yes
<i>Section Name:</i> Postoperative	<i>Harvest:</i> Yes

DBTableName AdultData

Definition: Indicate the number of hours the patient received ICU level of care immediately following the initial surgery until the time of transfer out of ICU. Include ICU unit, post-anesthesia recovery, and other similar critical care environments.

For those sites who provide postop ICU level of care in one single stay unit (admission to ICU to hospital discharge), document the number of hours immediately following the initial surgery until a physician order is written to change the level of care provided.

Do not count hours when the patient is kept in ICU because of staffing or bed availability.

<i>LowValue:</i> 0.1	<i>UsualRangeLow:</i> 1.0	<i>ACCField:</i> Not mapped
<i>HighValue:</i> 5000.0	<i>UsualRangeHigh:</i> 100.0	<i>ReportField:</i> Yes <i>NQFField:</i> No
		<i>ModelField:</i> No <i>PQRIField:</i> No

<i>Parent Long Name:</i> ICU Visit	<i>Format:</i> Real
<i>ParentShortName:</i> ICUVisit	<i>DataLength:</i>
<i>ParentValue:</i> = "Yes"	<i>Data Source:</i> User

Long Name: Readmission to ICU *SeqNo:* 5720
Short Name: **ICUReadm** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient spent time in an ICU after having been transferred to a step-down unit (lower level care). Specific situations are described below:
 OR -> ICU -> OR -> ICU = No
 OR -> ICU -> STEP DOWN -> ICU = Yes
 OR -> STEP DOWN -> ICU = Yes

Single care unit:
 Code ICU readmission when the level of care increases and is noted in the physician order.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Additional ICU Hours *SeqNo:* 5730
Short Name: **ICUAdHrs** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the number of additional hours spent in the ICU, or at the equivalent higher level of care in single stay units.

LowValue: 0.1 *UsualRangeLow:* 1.0 *ACCField:* Not mapped
HighValue: 5000.0 *UsualRangeHigh:* 100.0 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Readmission to ICU *Format:* Real

ParentShortName: ICUReadm *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Total Hrs ICU *SeqNo:* 5740
Short Name: **TotHrICU** *Core:* No
Section Name: Postoperative *Harvest:* No
DBTableName AdultData
Definition: Indicate the total number of hours post operation for which the patient was in the ICU. Leave blank if the patient expired in the OR during the initial surgery. Enter zero (0) if patient was never in post-anesthesia recovery or other similar critical care environment.
LowValue: 0.0 *UsualRangeLow:* 1.0 *ACCField:* Not mapped
HighValue: 10000.0 *UsualRangeHigh:* 100.0 *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No
Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User or Calculated

Long Name: Postop Echo *SeqNo:* 5744
Short Name: **POpTTEch** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether an echo was performed postoperatively prior to discharge.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Postop Echo Aortic Insufficiency *SeqNo:* 5745
Short Name: **POpTTAR** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of aortic regurgitation found on post op echo prior to discharge. Mild-to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Postop Echo *Format:* Text (categorical values specified by STS)

ParentShortName: POpTTEch *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	None
2	Trace/trivial
3	Mild
4	Moderate
5	Severe

Long Name: Postop Echo Mitral Insufficiency *SeqNo:* 5746
Short Name: **POpTTMR** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of mitral regurgitation found on post op echo prior to discharge. Mild-to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Postop Echo *Format:* Text (categorical values specified by STS)

ParentShortName: POpTTEch *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	None
2	Trace/trivial

- 3 Mild
- 4 Moderate
- 5 Severe

Long Name: Postop Echo Tricuspid Insufficiency *SeqNo:* 5747

Short Name: **POpTTTR** *Core:* Yes

Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the highest level of tricuspid regurgitation found on post op echo prior to discharge. Mild-to-moderate should be coded as moderate; moderate to severe should be coded as severe.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Postop Echo *Format:* Text (categorical values specified by STS)

ParentShortName: POpTTEch *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 None
- 2 Trace/trivial
- 3 Mild
- 4 Moderate
- 5 Severe

Long Name: Postop EF Done *SeqNo:* 5748
Short Name: **POpEFD** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the Ejection Fraction was measured postoperatively.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Postop EF *SeqNo:* 5749
Short Name: **POpEF** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the percentage of the blood emptied from the left ventricle at the end of the contraction measured postoperatively.

Enter a percentage in the range of 1 - 99. If a percentage range is reported, report a whole number using the "mean" (i.e., 50-55%, is reported as 53%).

Values reported as:

Normal = 60%

Good function = 50%

Mildly reduced = 45%

Fair function = 40%

Moderately reduced = 30%

Poor function = 25%

Severely reduced = 20%

LowValue: 1.0 *UsualRangeLow:* 5.0 *ACCFIELD:* Not mapped
HighValue: 99.0 *UsualRangeHigh:* 99.0 *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Postop EF Done *Format:* Real
ParentShortName: POpEFD *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Postop Cardiac Enzymes Drawn *SeqNo:* 5750
Short Name: **POpEnzDrawn** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether Cardiac Enzymes (biomarkers) were drawn post procedure.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Postop Peak CKMB *SeqNo:* 5751
Short Name: **POpPkCKMB** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the peak CKMB (highest level post procedure).
LowValue: 0.0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 5000.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Postop Cardiac Enzymes *Format:* Real
Drawn
ParentShortName: POpEnzDrawn *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Postop Peak Troponin I *SeqNo:* 5752
Short Name: **POpPkTri** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the peak Troponin I (highest level post procedure).
LowValue: 0.0 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 5000.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Postop Cardiac Enzymes *Format:* Real
Drawn
ParentShortName: POpEnzDrawn *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Postop Peak Troponin T *SeqNo:* 5753
Short Name: **POpPkTrT** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the peak Troponin T (highest level post procedure).
LowValue: 0.0 *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: 5000.0 *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Postop Cardiac Enzymes Drawn *Format:* Real
ParentShortName: POpEnzDrawn *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Postop 12 Lead EKG *SeqNo:* 5754
Short Name: **POpEKG** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the post procedure 12 lead EKG findings, if performed.
LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: *Format:* Text (categorical values specified by STS)
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Not Performed
 - 2 No Significant Changes
 - 3 New Pathological Q-Wave or LBBB
-

Long Name: Postop Imaging Study *SeqNo:* 5755
Short Name: **POpImagStdy** *Core:* Yes
Section Name: Postoperative *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the post procedure imaging study findings, if performed.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|--|
| 1 | Not performed |
| 2 | Angiographic evidence of new thrombosis or occlusion of graft or native coronary |
| 3 | Imaging evidence of new loss of viable myocardium |
| 4 | No evidence of new myocardial injury |

Long Name: Post-Op Events *SeqNo:* 5759
Short Name: **Complics** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a postoperative event occurred during the hospitalization for surgery. This includes the entire postoperative period up to discharge, even if over 30 days.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
--------------	---------------

- 1 Yes
- 2 No

Long Name: Post-Op-ReOp Bleed *SeqNo:* 5760
Short Name: **COpReBld** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was reexplored for mediastinal bleeding with or without tamponade either in the ICU or returned to the operating room.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* Yes

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Post-Op-ReOp Bleed Timing *SeqNo:* 5770
Short Name: **COpReBldTim** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate when reoperation for bleeding took place.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-ReOp Bleed *Format:* Text (categorical values specified by STS)

ParentShortName: COpReBld *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes and Value Definitions:

- | <u>Code:</u> | <u>Value:</u> | <u>Definition:</u> |
|--------------|---------------|--|
| 1 | Acute | Within 24 hours of the end of the case |
| 2 | Late | more than 24 hours after case ends |

Long Name: Post-Op-ReOp Vlv Dys *SeqNo:* 5780
Short Name: **COpReVlv** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for prosthetic or native valve dysfunction.

Dysfunction may be structural and/or non-structural failure. Dysfunction may be of a prosthesis, a progressive native disease process, or an acute event process that disrupts valve function and creates either clinical compromising insufficiency/regurgitation or valve orifice narrowing.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Reintervention-Graft Occlusion *SeqNo:* 5790
Short Name: **COpReGft** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room or the cath lab for intervention of coronary graft occlusion due to acute closure, thrombosis, technical or embolic origin.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* Yes

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes

2 No

Long Name: Post-Op-ReOp Other Card *SeqNo:* 5800
Short Name: **COpReOth** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for other cardiac reasons.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-ReOp Other Non Card *SeqNo:* 5810
Short Name: **COpReNon** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient returned to the operating room for other non-cardiac reasons.

This includes procedures requiring a return to the operating room such as tracheostomy, hematoma evacuation, planned delayed sternal closure, general surgery procedures.

This does not include procedures performed outside the operating room such as GI Lab for peg tube, shunts for dialysis, etc.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
--------------	---------------

- 1 Yes
- 2 No

Long Name: Post-Op-Open Chest With Planned Delayed Sternal Closure *SeqNo:* 5811
Short Name: **COpPlndDelay** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the chest was left open with planned delayed sternal closure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Comps-Op-Perioperative MI *SeqNo:* 5820
Short Name: **COpPerMI** *Core:* No
Section Name: Postoperative Events *Harvest:* No

DBTableName AdultData

Definition: (0-24 hours post-op)
 Indicate the presence of a peri-operative MI (0-24 hours post-op) as documented by the following criteria:

The CK-MB (or CK if MB not available) must be greater than or equal to 5 times the upper limit of normal, with or without new Q waves present in two or more contiguous ECG leads. No symptoms required.

(> 24 hours post-op)
 Indicate the presence of a peri-operative MI (> 24 hours post-op) as documented by at least one of the following criteria:

1. Evolutionary ST- segment elevations
2. Development of new Q- waves in two or more contiguous ECG leads
3. New or presumably new LBBB pattern on the ECG
4. The CK-MB (or CK if MB not available) must be greater than or equal to 3 times the upper limit of normal

Because normal limits of certain blood tests may vary, please check with your lab for normal limits for CK-MB and total CK.

Defining Reference Control Values (Upper Limit of Normal):
 Reference values must be determined in each laboratory by studies using specific assays with appropriate quality control, as reported in peer-reviewed journals. Acceptable imprecision (coefficient of variation) at the 99th percentile for each assay should be defined as < or = to 10%. Each individual laboratory should confirm the range of reference values in their specific setting.

—————
 This element should not be coded as an adverse event for evolving MI's unless their enzymes peak, fall, then have a second peak.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:
 1 Yes

2 No

Long Name: Post-Op-Sternotomy Issue *SeqNo:* 5830
Short Name: **CSternal** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName: AdultData

Definition: Indicate presence of a post operative sternotomy issue within 30 days of procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op Sternal instability/dehiscence (sterile) *SeqNo:* 5840
Short Name: **CSternalDehis** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName: AdultData

Definition: The code indicates sterile dehiscence of the sternal edges without evidence of infection but which requires surgical intervention. Skin and subcutaneous tissue may remain intact.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Sternotomy Issue *Format:* Text (categorical values specified by STS)

ParentShortName: CSternal *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Surgical Site Infection *SeqNo:* 5841
Short Name: **SurSInf** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether surgical site infection was diagnosed within 30 days of the procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Sternal-Superficial Wound Infection *SeqNo:* 5850
Short Name: **CSternalSupInf** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a superficial sternal wound infection occurred within 30 days of procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Surgical Site Infection *Format:* Text (categorical values specified by STS)

ParentShortName: SurSInf *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Infect-Deep Sternal Infection *SeqNo:* 5860
Short Name: **CISStDeep** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient, within 30 days postoperatively, had a deep sternal infection involving muscle, bone, and/or mediastinum REQUIRING OPERATIVE INTERVENTION.

Must have ALL of the following conditions:

1. Wound opened with excision of tissue (I&D) or re-exploration of mediastinum
2. Positive culture unless patient on antibiotics at time of culture or no culture obtained
3. Treatment with antibiotics beyond perioperative prophylaxis

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op-Surgical Site Infection *Format:* Text (categorical values specified by STS)

ParentShortName: SurSInf *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Sternal-Mediastinitis *SeqNo:* 5870
Short Name: **CSternalMedia** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient developed mediastinitis within 30 days of the surgical procedure.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Surgical Site Infection *Format:* Text (categorical values specified by STS)

ParentShortName: SurSInf *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Sternal-Mediastinitis - Date of Diagnosis *SeqNo:* 5880
Short Name: **CSTernalMediaDtDiag** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData
Definition: Indicate the date one which the mediastinitis was diagnosed.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Post-Op-Sternal-Mediastinitis *Format:* Date mm/dd/yyyy
ParentShortName: CSTernalMedia *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Post-Op-Sternal-Mediastinitis - Secondary Procedure - Open With Packing/Irrigation *SeqNo:* 5890
Short Name: **CSTernalMediaSPOpen** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included leaving the incision open with packing/irrigation.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Post-Op-Sternal-Mediastinitis *Format:* Text (categorical values specified by STS)
ParentShortName: CSTernalMedia *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Sternal-Mediastinitis - Secondary Procedure - Wound Vac *SeqNo:* 5900
Short Name: **CSternalMediaSPWVa** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included wound vac.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Post-Op-Sternal-Mediastinitis *Format:* Text (categorical values specified by STS)
ParentShortName: CSternalMedia *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Sternal-Mediastinitis - Secondary Procedure - Muscle Flap *SeqNo:* 5910
Short Name: **CSternalMediaSPMuscle** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData
Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included muscle flap.
LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*
Parent Long Name: Post-Op-Sternal-Mediastinitis *Format:* Text (categorical values specified by STS)
ParentShortName: CSternalMedia *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Sternal-Mediastinitis - Secondary Procedure - Omental Flap *SeqNo:* 5920

Short Name: **CSTernalMediaSPOmental** *Core:* Yes

Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the secondary procedure performed to treat the mediastinitis included omental flap.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Sternal-Mediastinitis *Format:* Text (categorical values specified by STS)

ParentShortName: CSTernalMedia *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Infect-Thoracotomy *SeqNo:* 5930

Short Name: **CIThor** *Core:* Yes

Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had an infection involving a thoracotomy or parasternal site.

Must have ALL of the following conditions:

1. Wound opened with excision of tissue (I&D) or re-exploration of mediastinum
2. Positive culture unless patient on antibiotics at time of culture or no culture obtained
3. Treatment with antibiotics beyond perioperative prophylaxis

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op-Surgical Site Infection *Format:* Text (categorical values specified by STS)

ParentShortName: SurSInf *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Infect-Conduit Harvest or Cannulation Site *SeqNo:* 5940
Short Name: **CILeg** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had an infection involving a conduit harvest or cannulation site

Must have ALL of the following conditions:

1. Wound opened with excision of tissue (I&D)
2. Positive culture unless patient on antibiotics at time of culture or no culture obtained
3. Treatment with antibiotics beyond perioperative prophylaxis

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op-Surgical Site Infection *Format:* Text (categorical values specified by STS)

ParentShortName: SurSInf *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- | | |
|---|-----|
| 1 | Yes |
| 2 | No |

<i>Long Name:</i>	Comps-Infect-Arm	<i>SeqNo:</i>	5950
<i>Short Name:</i>	CIArm	<i>Core:</i>	No
<i>Section Name:</i>	Postoperative Events	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether the patient had an infection involving an arm harvest site.		
	Must have one of the following conditions:		
	1. Wound opened with excision of tissue (I&D)		
	2. Positive culture		
	3. Treatment with antibiotics		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	Post-Op Events	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	Complics	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	

<i>Long Name:</i>	Post-Op-Wound Intervention - Open With Packing/Irrigation	<i>SeqNo:</i>	5960
<i>Short Name:</i>	WndIntOpen	<i>Core:</i>	Yes
<i>Section Name:</i>	Postoperative Events	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether wound intervention required within 30 days following procedure for wounds other than sternotomy included leaving the incision open with packing/irrigation.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	<i>NQFField:</i>
		<i>ModelField:</i>	<i>PQRIField:</i>
<i>Parent Long Name:</i>	Post-Op-Surgical Site Infection	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	SurSInf	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	

Long Name: Post-Op-Wound Intervention - Wound Vac *SeqNo:* 5970
Short Name: **WndIntWVac** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether wound intervention required within 30 days following procedure for wounds other than sternotomy included wound vac.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Surgical Site Infection *Format:* Text (categorical values specified by STS)

ParentShortName: SurSInf *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Comps-Infect-Septicemia *SeqNo:* 6000
Short Name: **CISeptic** *Core:* No
Section Name: Postoperative Events *Harvest:* No

DBTableName AdultData

Definition: Indicate whether the patient had septicemia (requires positive blood cultures) postoperatively.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Sepsis *SeqNo:* 6010
Short Name: **CSepsis** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Sepsis is defined as evidence of serious infection accompanied by a deleterious systemic response. In the time period of the first 48 postoperative or postprocedural hours, the diagnosis of sepsis requires the presence of a Systemic Inflammatory Response Syndrome (SIRS) resulting from a proven infection (such as bacteremia, fungemia or urinary tract infection). In the time period after the first 48 postoperative or postprocedural hours, sepsis may be diagnosed by the presence of a SIRS resulting from suspected or proven infection. During the first 48 hours, a SIRS may result from the stress associated with surgery and/or cardiopulmonary bypass. Thus, the clinical criteria for sepsis during this time period should be more stringent. A systemic inflammatory response syndrome (SIRS) is present when at least two of the following criteria are present: hypo- or hyperthermia (>38.5 or <36.0), tachycardia or bradycardia, tachypnea, leukocytosis or leukopenia, and thrombocytopenia.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Post-Op-Sepsis-Positive Blood Cultures *SeqNo:* 6020
Short Name: **CSepsisPBC** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a recognized pathogen is cultured from 1 or more blood cultures and is not related to an infection at another site.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Sepsis *Format:* Text (categorical values specified by STS)

ParentShortName: CSepsis *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Neuro-Stroke Perm *SeqNo:* 6030
Short Name: **CNStrokP** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has a postoperative stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Neuro-Transient Ischemic Attack - TIA *SeqNo:* 6040
Short Name: **CNStrokTTIA** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a postoperative Transient Ischemic Attack (TIA): Loss of neurological function that was abrupt in onset but with complete return of function within 24 hours.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Comps-Neuro-Stroke Trans - RIND *SeqNo:* 6050
Short Name: **CNStrokTRIND** *Core:* No
Section Name: Postoperative Events *Harvest:* No

DBTableName AdultData

Definition: Indicate whether the patient had a postoperative Reversible Ischemic Neurologic Deficit (RIND): Loss of neurological function with symptoms at least 24 hours after onset but with complete return of function within 72 hours.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

<i>Long Name:</i>	Comps-Neuro-Cont Coma >=24Hrs	<i>SeqNo:</i>	6060
<i>Short Name:</i>	CNComa	<i>Core:</i>	No
<i>Section Name:</i>	Postoperative Events	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether the patient had a new postoperative coma that persists for at least 24 hours secondary to anoxic/ischemic and/or metabolic encephalopathy, thromboembolic event or cerebral bleed.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCFIELD:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes <i>NQFField:</i> No
		<i>ModelField:</i>	No <i>PQRIField:</i> No
<i>Parent Long Name:</i>	Post-Op Events	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	Complics	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	

<i>Long Name:</i>	Post-Op-Neuro-Coma/Encephalopathy	<i>SeqNo:</i>	6070
<i>Short Name:</i>	CNComaEnceph	<i>Core:</i>	Yes
<i>Section Name:</i>	Postoperative Events	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether the patient developed a postoperative coma and/or encephalopathy.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCFIELD:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	<i>NQFField:</i>
		<i>ModelField:</i>	<i>PQRIField:</i>
<i>Parent Long Name:</i>	Post-Op Events	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	Complics	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	None	
	2	Anoxic	
	3	Embolic	
	4	Drug	

- 5 Metabolic
- 6 Intracranial Bleeding
- 7 Other

Long Name: Post-Op-Neuro-Paralysis *SeqNo:* 6110
Short Name: **CNParal** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a new postoperative paralysis, paraparesis, or paraplegia related to spinal cord ischemia and not related to a stroke.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Post-Op-Neuro-Paralysis Type *SeqNo:* 6120
Short Name: **CNParalTy** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the new postoperative paralysis, paraparesis, or paraplegia was transient or permanent.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op-Neuro-Paralysis *Format:* Text (categorical values specified by STS)

ParentShortName: CNParal *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Transient |

2 Permanent

Long Name: Post-Op-Pulm-Vent Prolonged *SeqNo:* 6130
Short Name: **CPVntLng** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient had prolonged pulmonary ventilator > 24 hours.

Include (but not limited to) causes such as ARDS, pulmonary edema, and/or any patient requiring mechanical ventilation > 24 hours postoperatively.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Comps-Pulm-Pulm Embolism *SeqNo:* 6140
Short Name: **CPPulEmb** *Core:* No
Section Name: Postoperative Events *Harvest:* No
DBTableName AdultData

Definition: Indicate whether the patient had a pulmonary embolism diagnosed by study such as V/Q scan, angiogram, or spiral CT.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes

2 No

Long Name: Post-Op-Pulm-Pneumonia *SeqNo:* 6150
Short Name: **CPPneum** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient had Pneumonia diagnosed by any of the following: positive cultures of sputum, transtracheal fluid, bronchial washings, and/or clinical findings consistent with the diagnosis of pneumonia (which may include chest x-ray diagnostic of pulmonary infiltrates).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Venous Thromboembolism-VTE *SeqNo:* 6160
Short Name: **CVTE** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient developed postoperative venous thrombosis or thromboembolic event.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Pulmonary Thromboembolism *SeqNo:* 6170
Short Name: **PulmEmb** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a pulmonary thromboembolism diagnosed by radiologic study such as V/Q scan, angiogram, or spiral CT.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Venous Thromboembolism-VTE *Format:* Text (categorical values specified by STS)

ParentShortName: CVTE *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Deep Venous Thrombosis *SeqNo:* 6180
Short Name: **DVT** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient had thrombosis (clot formation) in a deep vein.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Venous Thromboembolism-VTE *Format:* Text (categorical values specified by STS)

ParentShortName: CVTE *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Pleural Effusion Requiring Drainage *SeqNo:* 6190
Short Name: **CPIEff** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a postoperative pleural effusion required drainage via thoracentesis or chest tube insertion.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Renal-Renal Failure *SeqNo:* 6200
Short Name: **CRenFail** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had acute renal failure or worsening renal function resulting in ONE OR BOTH of the following:

1. ~~Increase of serum creatinine to > 2.0 AND 2x most recent preoperative creatinine level.~~
2. A new requirement for dialysis postoperatively.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

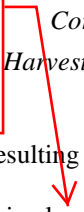
ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

The Renal Failure criteria has been changed to meet national standards. The creatinine must be 3x baseline or >=4.0 to qualify as failure. See training manual for RIFLE criteria definitions.



Long Name: Post-Op-Renal-Dialysis Req *SeqNo:* 6210
Short Name: **CRenDial** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a new requirement for dialysis postoperatively, which may include hemodialysis, peritoneal dialysis.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op-Renal-Renal Failure *Format:* Text (categorical values specified by STS)

ParentShortName: CRenFail *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Dialysis Duration *SeqNo:* 6220
Short Name: **DialDur** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether dialysis was required after hospital discharge.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op-Renal-Dialysis Req *Format:* Text (categorical values specified by STS)

ParentShortName: CRenDial *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Ultra Filtration *SeqNo:* 6230
Short Name: **CUltraFil** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient required Ultra filtration.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Vasc-Iliac/Fem Dissect *SeqNo:* 6240
Short Name: **CVallFem** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a dissection occurring in the iliac or femoral arteries.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Vasc-Acute Limb Isch *SeqNo:* 6250
Short Name: **CVaLbIsch** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had any complication producing limb ischemia. This may include upper or lower limb ischemia.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Comps-Other-Heart Block *SeqNo:* 6260
Short Name: **COtHtBlk** *Core:* No
Section Name: Postoperative Events *Harvest:* No

DBTableName AdultData

Definition: Indicate whether the patient had a new heart block requiring the implantation of a permanent pacemaker of any type prior to discharge.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Rhythm Disturbance Requiring Perm Device *SeqNo:* 6270
Short Name: **CRhythmDis** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient developed a new dysrhythmia requiring insertion of a permanent device.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Pacemaker
2	ICD
3	Pacemaker/ICD
4	None

Long Name: Post-Op-Other-Card Arrest *SeqNo:* 6280
Short Name: **COtArrst** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had an acute cardiac arrest documented by one of the following:
a. Ventricular fibrillation
b. Rapid ventricular tachycardia with hemodynamic instability
c. Asystole

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Other-Anticoag Event *SeqNo:* 6290
Short Name: **COtCoag** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had bleeding, hemorrhage, and/or embolic events related to anticoagulant therapy postoperatively.

This may include patients who experience Disseminated Intravascular Coagulopathy (DIC) or Heparin Induced Thrombocytopenia (HIT).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Other-Tamponade Non-Surgical Intervention *SeqNo:* 6300
Short Name: **COTamp** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had fluid in the pericardial space compromising cardiac filling, and requiring intervention other than returning to the operating room, such as pericardiocentesis.

This should be documented by either:

1. Echo showing pericardial fluid and signs of tamponade such as right heart compromise, or
2. Systemic hypotension due to pericardial fluid compromising cardiac function

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Other-GI Event *SeqNo:* 6310
Short Name: **COtGI** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a postoperative occurrence of any GI event, including but not limited to:
 a. GI bleeding requiring transfusion
 b. Pancreatitis with abnormal amylase/lipase requiring nasogastric (NG) suction therapy
 c. Cholecystitis requiring cholecystectomy or drainage
 d. Mesenteric ischemia requiring exploration
 e. Hepatic failure
 f. Prolonged ileus
 g. Clostridium difficile

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Post-Op-Other-Multi Sys Fail *SeqNo:* 6320
Short Name: **COtMSF** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had two or more major organ systems suffer compromised functions.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
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- 1 Yes
- 2 No

Long Name: Post-Op-Other-A Fib *SeqNo:* 6330
Short Name: **COTAFib** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a new onset of atrial fibrillation/flutter (AF) requiring treatment. Does not include recurrence of previously documented AF which had been present preoperatively.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Post-Op-Ao Dissect *SeqNo:* 6340
Short Name: **CVaAoDis** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had a dissection occurring in any part of the aorta.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

- | <u>Code:</u> | <u>Value:</u> |
|--------------|---------------|
| 1 | Yes |
| 2 | No |

Long Name: Post-Op-Recurrent Laryngeal Nerve Injury *SeqNo:* 6341
Short Name: **RecLarynNrvInj** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient has symptoms of recurrent laryngeal nerve injury, (e.g., hoarseness, difficulty speaking, etc.).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Phrenic Nerve Injury *SeqNo:* 6342
Short Name: **PhrenNrvInj** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether patient has symptoms of recurrent phrenic nerve injury, (e.g., immobility or elevation of the diaphragm, etc.).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Post-Op-Other-Other *SeqNo:* 6350
Short Name: **COtOther** *Core:* Yes
Section Name: Postoperative Events *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether a postoperative event occurred that is not identified in the categories above yet impacts hospital length of stay and/or outcome.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Post-Op Events *Format:* Text (categorical values specified by STS)

ParentShortName: Complics *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Mort-Mortality *SeqNo:* 6360
Short Name: **Mortality** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient has been declared dead within this hospital or any time after discharge from this hospitalization. This includes all causes of death, including those causes clearly unrelated to the operation.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Mort-DC Status *SeqNo:* 6370
Short Name: **MtDCStat** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was alive or dead AT discharge from the hospitalization in which surgery occurred.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes

ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Alive

2 Dead

Long Name: Mort-30d Status *SeqNo:* 6380
Short Name: **Mt30Stat** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient was alive or dead at 30 days post surgery (whether in hospital or not).

LowValue: *UsualRangeLow:* *ACCField:* Not mapped

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes

ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

1 Alive

2 Dead

3 Unknown

Long Name: Mort-Op Death-Method Of Verification *SeqNo:* 6381
Short Name: **Mt30StatMeth** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the primary method used to verify the patient's 30-day mortality status.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: *Format:* Text (categorical values specified by STS)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Phone call to patient or family
- 2 Letter from medical provider
- 3 Evidence of life in medical record (lab tests, cardiac rehab visits, etc.)
- 4 Office visit to surgeon more than 30 days after procedure
- 5 Social Security Death Master File
- 6 Other

Long Name: Mort-Op Death *SeqNo:* 6390
Short Name: **MtOpD** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether the patient had an operative mortality: Includes both (1) all deaths occurring during the acute episode of care in which the operation was performed (this includes patients transferred to other acute care facilities), even if after 30 days; and (2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure unless the cause of death is clearly unrelated to the operation.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Mort-Mortality *Format:* Text (categorical values specified by STS)

ParentShortName: Mortalty *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code:	Value:
1	Yes
2	No

Long Name: Mort-Date *SeqNo:* 6400
Short Name: **MtDate** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the date the patient was declared dead.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Mort-Mortality *Format:* Date mm/dd/yyyy

ParentShortName: Mortalty *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Long Name: Mort-Location *SeqNo:* 6410
Short Name: **MtLocatn** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the patient's location at time of death.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Mort-Mortality *Format:* Text (categorical values specified by STS)

ParentShortName: Mortality *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Operating Room (OR)
During Initial Surgery
- 2 Hospital (Other Than
Operating Room)
- 3 Home
- 7 Extended Care Facility
- 8 Hospice
- 9 Acute Rehabilitation
- 5 Operating Room (OR) During
Reoperation
- 6 Unknown
- 10 Other

Long Name: Mort-Prim Cause *SeqNo:* 6420
Short Name: **MtCause** *Core:* Yes
Section Name: Mortality *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the PRIMARY cause of death, i.e., the first significant abnormal event which ultimately led to death.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: Mort-Mortality

Format: Text (categorical values specified by STS)

ParentShortName: Mortalty

DataLength:

ParentValue: = "Yes"

Data Source: User

Harvest Codes:

Code: Value:

- 1 Cardiac
- 2 Neurologic
- 3 Renal
- 4 Vascular
- 5 Infection
- 6 Pulmonary
- 7 Valvular
- 700 Unknown
- 777 Other

Long Name: ADP Inhibitors - Discharge *SeqNo:* 6430
Short Name: **DCADP** *Core:* Yes
Section Name: Discharge *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on ADP Inhibitors.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Antiarrhythmics - Discharge *SeqNo:* 6440
Short Name: **DCAArhy** *Core:* Yes
Section Name: Discharge *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on antiarrhythmics.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

<i>Long Name:</i>	Antiarrhythmics - Discharge - Medication Name	<i>SeqNo:</i>	6450
<i>Short Name:</i>	DCAArMN	<i>Core:</i>	No
<i>Section Name:</i>	Discharge	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate the name of the antiarrhythmic medication the patient was on when discharged from the facility.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	No
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	Antiarrhythmics - Discharge	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	DCAArhy	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Yes"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Amiodarone	
	2	Other	

<i>Long Name:</i>	Aspirin - Discharge	<i>SeqNo:</i>	6460
<i>Short Name:</i>	DCASA	<i>Core:</i>	Yes
<i>Section Name:</i>	Discharge	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate whether or not the patient was discharged from facility on Aspirin, or if it was contraindicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	Yes
		<i>NQFField:</i>	Yes
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>	Mort-DC Status	<i>Format:</i>	Text (categorical values specified by STS)
<i>ParentShortName:</i>	MtDCStat	<i>DataLength:</i>	
<i>ParentValue:</i>	= "Alive"	<i>Data Source:</i>	User
 Harvest Codes:			
	<u>Code:</u>	<u>Value:</u>	
	1	Yes	
	2	No	
	3	Contraindicated	

Long Name: ACE or ARB Inhibitors - Discharge *SeqNo:* 6470
Short Name: **DCACE** *Core:* Yes
Section Name: Discharge *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged from facility on ACE or ARB Inhibitors, or if it was contraindicated or not indicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
4	No, contraindicated
5	No, not indicated

Long Name: Beta Blockers - Discharge *SeqNo:* 6480
Short Name: **DCBeta** *Core:* Yes
Section Name: Discharge *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether or not the patient was discharged on beta blockers, or if beta blocker was contraindicated or not indicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

3 Contraindicated

Long Name: Lipid Lowering - Discharge *SeqNo:* 6490
Short Name: **DCLipid** *Core:* Yes
Section Name: Discharge *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether or not the patient was discharged on a statin or lipid lowering medication, or if it was contraindicated or not indicated. The contraindication must be documented in the medical record by a physician, nurse practitioner, or physician assistant.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* Yes
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*
ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No
3	Contraindicated

Long Name: Lipid Lowering - Discharge - Medication Type *SeqNo:* 6500
Short Name: **DCLipMT** *Core:* Yes
Section Name: Discharge *Harvest:* Yes
DBTableName AdultData

Definition: Indicate the type of Lipid Lowering medication the patient was on when discharged from the facility.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Lipid Lowering - Discharge *Format:* Text (categorical values specified by STS)

ParentShortName: DCLipid *DataLength:*
ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Statin
2	Non statin

- 3 Both
- 4 Other

Long Name: Coumadin - Discharge *SeqNo:* 6510
Short Name: **DCCoum** *Core:* Yes
Section Name: Discharge *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient was discharged from the facility on Coumadin.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Direct Thrombin Inhibitors - Discharge *SeqNo:* 6511
Short Name: **DCDirThromIn** *Core:* Yes
Section Name: Discharge *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient was discharged from the facility on a direct thrombin inhibitor.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* *NQFField:*
ModelField: *PQRIField:*

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

<u>Code:</u>	<u>Value:</u>
1	Yes
2	No

Long Name: Discharge Location *SeqNo:* 6520
Short Name: **DisLoctn** *Core:* Yes
Section Name: Discharge *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the location to where the patient was discharged.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding

HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No

ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status

Format: Text (categorical values specified by STS)

ParentShortName: MtDCStat

DataLength:

ParentValue: = "Alive"

Data Source: User

Harvest Codes:

Code: Value:

- 1 Home
- 2 Extended Care/Transitional
Care Unit/Rehab
- 3 Other Hospital
- 4 Nursing Home
- 5 Hospice
- 777 Other

Long Name: Cardiac Rehabilitation Referral *SeqNo:* 6530
Short Name: **CardRef** *Core:* Yes
Section Name: Discharge *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether advice was given or discussion conducted with the patient (by physician, nurse, or other personnel) regarding the importance of joining a cardiac rehabilitation program, or an appointment made.

LowValue: *UsualRangeLow:* *ACCField:* Mapped - Definition and coding
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No
- 3 Not Applicable

Long Name: Smoking Cessation Counseling *SeqNo:* 6540
Short Name: **SmokCoun** *Core:* Yes
Section Name: Discharge *Harvest:* Yes

DBTableName AdultData

Definition: Indicate whether, prior to discharge from the acute care facility, the patient received smoking cessation counseling. Please select "Not Applicable" for those patients with no prior history of smoking or remote (more than 1 year) history.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

Code: Value:

- 1 Yes
- 2 No

3 Not Applicable

Long Name: Readmit <=30 Days from DOP *SeqNo:* 6550
Short Name: **Readm30** *Core:* Yes
Section Name: Readmission *Harvest:* Yes
DBTableName AdultData

Definition: Indicate whether the patient was readmitted to an acute care facility as an in-patient within 30 days from the date of initial surgery for ANY reason. This includes readmissions to acute care, primary care institutions only. Do not include readmissions to rehabilitation hospital, or nursing home.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Mort-DC Status *Format:* Text (categorical values specified by STS)

ParentShortName: MtDCStat *DataLength:*

ParentValue: = "Alive" *Data Source:* User

Harvest Codes:

Code: Value:

1 Yes

2 No

Long Name: Readmit Reason *SeqNo:* 6560
Short Name: **ReadmRsn** *Core:* Yes
Section Name: Readmission *Harvest:* Yes
DBTableName AdultData

Definition: Indicate the primary reason that the patient was readmitted as an in-patient within 30 days from the date of initial surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Readmit <=30 Days from DOP *Format:* Text (categorical values specified by STS)

ParentShortName: Readm30 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

20 Anticoagulation
Complication - Valvular

-
- 21 Anticoagulation
Complication -
Pharmacological
 - 2 Arrhythmia/Heart Block
 - 3 Congestive Heart Failure
 - 5 Myocardial Infarction and/or
Recurrent Angina
 - 6 Pericardial Effusion and/or
Tamponade
 - 7 Pneumonia or other
Respiratory Complication
 - 22 Coronary Artery Dysfunction
 - 8 Valve Dysfunction
 - 9 Infection - Deep Sternum /
Mediastinitis
 - 23 Infection - Conduit Harvest
Site
 - 14 Renal Failure
 - 15 TIA
 - 18 Permanent CVA
 - 19 Acute Vascular Complication
 - 24 Subacute Endocarditis
 - 25 VAD Complication
 - 26 Transplant Rejection
 - 28 PE
 - 27 DVT
 - 998 Other - Related Readmission
 - 999 Other - Nonrelated
Readmission
-

Long Name: Readmit Reason - Primary Procedure *SeqNo:* 6570
Short Name: **ReadmPro** *Core:* Yes
Section Name: Readmission *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the primary procedure that the patient received after being readmitted as an in-patient within 30 days from the date of initial surgery.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: Readmit <=30 Days from DOP *Format:* Text (categorical values specified by STS)

ParentShortName: Readm30 *DataLength:*

ParentValue: = "Yes" *Data Source:* User

Harvest Codes:

Code: Value:

10 OR for Bleeding
20 Pacemaker insertion/AICD
30 PCI
40 Pericardiotomy/Pericardiocentesis
50 OR for Coronary Arteries
60 OR for Valve
70 OR for Sternal Debridement/Muscle Flap
80 Dialysis
90 OR for Vascular
700 No Procedure Performed
710 Other Procedure
720 Unknown

<i>Long Name:</i>	Risk Model Coefficients Version Number	<i>SeqNo:</i>	6580
<i>Short Name:</i>	PredCoefVrsn	<i>Core:</i>	No
<i>Section Name:</i>	Risk Scores	<i>Harvest:</i>	No
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	The version number of the set of coefficients used in the risk models to calculate the risk scores for this record. The value is inserted into the record at the time the risk calculations are performed. The version numbers will be specified by the STS.		
<i>LowValue:</i>	<i>UsualRangeLow:</i>	<i>ACCField:</i>	Not mapped
<i>HighValue:</i>	<i>UsualRangeHigh:</i>	<i>ReportField:</i>	No
		<i>NQFField:</i>	No
		<i>ModelField:</i>	No
		<i>PQRIField:</i>	No
<i>Parent Long Name:</i>		<i>Format:</i>	Text
<i>ParentShortName:</i>		<i>DataLength:</i>	
<i>ParentValue:</i>		<i>Data Source:</i>	Automatic

<i>Long Name:</i>	Predicted Risk of Mortality	<i>SeqNo:</i>	6590
<i>Short Name:</i>	PredMort	<i>Core:</i>	Yes
<i>Section Name:</i>	Risk Scores	<i>Harvest:</i>	Yes
<i>DBTableName</i>	AdultData		
<i>Definition:</i>	Indicate the Predicted Risk of Mortality.		
<i>LowValue:</i>	0.000	<i>UsualRangeLow:</i>	<i>ACCField:</i> Not mapped
<i>HighValue:</i>	100.000	<i>UsualRangeHigh:</i>	<i>ReportField:</i> Yes
			<i>NQFField:</i> No
			<i>ModelField:</i> No
			<i>PQRIField:</i> No
<i>Parent Long Name:</i>		<i>Format:</i>	Real number, at least 0.3 digits (3 decimal places)
<i>ParentShortName:</i>		<i>DataLength:</i>	
<i>ParentValue:</i>		<i>Data Source:</i>	Calculated

Long Name: Predicted Deep Sternal Wound Infx *SeqNo:* 6600
Short Name: **PredDeep** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Deep Sternal Wound Infection.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: Predicted Reoperation *SeqNo:* 6610
Short Name: **PredReop** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Reoperation.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: Predicted Permanent Stroke *SeqNo:* 6620
Short Name: **PredStro** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Permanent Stroke.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: Predicted Prolonged Ventilation *SeqNo:* 6630
Short Name: **PredVent** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Prolonged Ventilation.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: Predicted Renal Failure *SeqNo:* 6640
Short Name: **PredRenF** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Renal Failure.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: Predicted Morbidity or Mortality *SeqNo:* 6650
Short Name: **PredMM** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Morbidity or Mortality.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: Predicted Short Length of Stay *SeqNo:* 6660
Short Name: **Pred6D** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Short Length of Stay.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: Predicted Long Length of Stay *SeqNo:* 6670
Short Name: **Pred14D** *Core:* Yes
Section Name: Risk Scores *Harvest:* Yes

DBTableName AdultData

Definition: Indicate the Predicted Risk of Long Length of Stay.

LowValue: 0.000 *UsualRangeLow:* *ACCField:* Not mapped
HighValue: 100.000 *UsualRangeHigh:* *ReportField:* Yes *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real number, at least 0.3 digits
 (3 decimal places)

ParentShortName: *DataLength:*

ParentValue: *Data Source:* Calculated

Long Name: STS Custom Numeric Field 1 *SeqNo:* 6680
Short Name: **STSCustNum1** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: STS Custom Numeric Field 2 *SeqNo:* 6690
Short Name: **STSCustNum2** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: STS Custom Numeric Field 3 *SeqNo:* 6700
Short Name: **STSCustNum3** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: STS Custom Numeric Field 4 *SeqNo:* 6710
Short Name: **STSCustNum4** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: STS Custom Numeric Field 5 *SeqNo:* 6720
Short Name: **STSCustNum5** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Real
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: STS Custom Text Field 1 *SeqNo:* 6730
Short Name: **STSCustTxt1** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* Yes

Parent Long Name: *Format:* Text length 100
ParentShortName: *DataLength:*
ParentValue: *Data Source:* User

Long Name: STS Custom Text Field 2 *SeqNo:* 6740
Short Name: **STSCustTxt2** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text length 100

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: STS Custom Text Field 3 *SeqNo:* 6750
Short Name: **STSCustTxt3** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCFIELD:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text length 100

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: STS Custom Text Field 4 *SeqNo:* 6760
Short Name: **STSCustTxt4** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text length 100

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User

Long Name: STS Custom Text Field 5 *SeqNo:* 6770
Short Name: **STSCustTxt5** *Core:* Yes
Section Name: STS Custom Fields *Harvest:* Yes

DBTableName AdultData

Definition: This field will be used to store values defined by the STS at a future date if new data fields need to be collected before a data specification upgrade can be completed. Users should not store any data in this field except as explicitly stated by the STS.

LowValue: *UsualRangeLow:* *ACCField:* Not mapped
HighValue: *UsualRangeHigh:* *ReportField:* No *NQFField:* No
ModelField: No *PQRIField:* No

Parent Long Name: *Format:* Text length 100

ParentShortName: *DataLength:*

ParentValue: *Data Source:* User